

CITY COUNCIL AGENDA ITEM COVER MEMO

Agenda Item Number _____

Meeting Type: Regular

Meeting Date: 2/9/2012

Action Requested By:
Engineering

Agenda Item Type
Resolution

Subject Matter:

Agreement with Christopher Professional Enterprises, Inc.

Exact Wording for the Agenda:

Resolution authorizing the Mayor to enter into an agreement with the low bidder, Christopher Professional Enterprises, Inc. for Martin Road Improvements on Redstone Arsenal (Electrical Relocation Phase), Project No. 65-10-RD09

Note: If amendment, please state title and number of the original

Item to be considered for: Action

Unanimous Consent Required: No

Briefly state why the action is required; why it is recommended; what Council action will provide, allow and accomplish and; any other information that might be helpful.

This agreement is for the relocation of approximately 2.5 miles of electrical and communication lines on Martin Road, between Zierdt Road and Rideout Road on Redstone Arsenal, Alabama, in preparation of roadway improvements for a total contract amount of \$1,704,231.00. Account No. 23-6500-0813-8512

Associated Cost:

Budgeted Item: Yes

MAYOR RECOMMENDS OR CONCURS: Yes

Department Head: 

Date: 2/3/2012

ROUTING SLIP CONTRACTS AND AGREEMENTS

Originating Department: **Engineering**

Council Meeting Date: **2/9/2012**

Department Contact: **Lynn Majors**

Phone # **256-427-5201**

Contract or Agreement: **Construction Contract**

Document Name: **Christopher-Martin Road-Project No. 65-10-RD09**

City Obligation Amount: **\$1,704,231.00**

Total Project Budget: **\$1,704,231.00**

Uncommitted Account Balance: **0**

Account Number: **23-6500-0813-8512**

Procurement Agreements




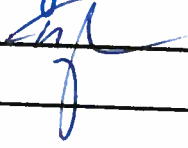
Title 39

Competitive

Grant-Funded Agreements

**Not
Applicable**

Grant Name:

Department	Signature	Date
1) Originating		2/3/12
2) Legal		2/3/12
3) Finance		2/7
4) Originating		
5) Copy Distribution		
a. Mayor's office (2 copies)		
b. Clerk-Treasurer (Original & 2 copies)		
c. Legal (1 copy)		

RESOLUTION NO. 12-

BE IT RESOLVED by the City Council of the City of Huntsville, Alabama, that the Mayor be, and he is hereby authorized, to enter into a contract with the low bidder, Christopher Professional Enterprises, Inc., in the amount of One Million Seven Hundred Four Thousand Two Hundred Thirty-One and No/100 Dollars (\$1,704,231.00) for Martin Road Improvements on Redstone Arsenal (Electrical Relocation Phase), Project No. 65-10-RD09, in Huntsville, Alabama, on behalf of the City of Huntsville, a municipal corporation in the State of Alabama, which said agreement is substantially in words and figures similar to that document attached hereto and identified as "Contract between City of Huntsville and Christopher Professional Enterprises, Inc. for Martin Road Improvements on Redstone Arsenal (Electrical Relocation Phase), Project No. 65-10-RD09" consisting of a total of one (1) page plus one hundred and twelve (112) additional pages consisting of Attachments A1-J, Supplement to General Requirements for Construction of Public Improvements and all Addenda, "Certification of Compliance with Title 39, Code of Alabama", and "E-Verify Statement", and the date of February 9, 2012 appearing on the margin of the first page, together with the signature of the President or President Pro Tem of the City Council, and an executed copy of said document being permanently kept on file in the Office of the City Clerk of the City of Huntsville, Alabama.

ADOPTED this the _____ day of _____, 2012.

President of the City Council of
the City of Huntsville, Alabama

APPROVED this the _____ day of _____, 2012.

Mayor of the City of Huntsville,
Alabama

**CONTRACT BETWEEN CITY OF HUNTSVILLE
AND
CHRISTOPHER PROFESSIONAL ENTERPRISES, INC.
FOR
MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL (ELECTRICAL
RELOCATION PHASE)
PROJECT NO. 65-10-RD09**

~~~~~  
**STATE OF ALABAMA}  
MADISON COUNTY}**

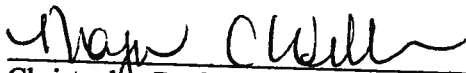
THIS CONTRACT, made and entered into this 9th day of February, 2012, between the CITY OF HUNTSVILLE, ALABAMA, a Municipal Corporation, sometimes referred to herein as City, and CHRISTOPHER PROFESSIONAL ENTERPRISES, INC., sometimes referred to herein as Contractor.

**-WITNESSETH-**

WHEREAS, the City desires to install, construct or make certain improvements known as Martin Road Improvements on Redstone Arsenal (Electrical Relocation Phase), Project #65-10-RD09, in the City of Huntsville, Madison County, Alabama, all in accordance with details, specifications, surveys and general requirements prepared by the City of Huntsville Urban Development Department - Engineering Division, which are on file in the Office of the City Engineer of the City of Huntsville, Alabama, all of which details, specifications, surveys and general requirements are made a part of this contract, and

NOW, THEREFORE, it is agreed that the Contractor promises and agrees to make such improvements for the party of the first part for the considerations hereinafter set out. The Contractor promises and agrees to furnish all necessary labor, materials and equipment for the doing of the same, all to be done in accordance with such details, plans, specifications and general requirements hereto attached and made a part of this contract.

FOR THE PERFORMANCE of such work, the City agrees to pay the Contractor as follows per Attachment "A-1"

  
Christopher Professional Enterprises, Inc.

BY:

\_\_\_\_\_  
Tommy Battle, Mayor

ATTEST:



\_\_\_\_\_  
Charles E. Hagood  
City Clerk Treasurer

\_\_\_\_\_  
Mark Russell  
City Council President

DATE: \_\_\_\_\_

**MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL (ELECTRICAL RELOCATION PHASE)**  
**PROJECT NO. 65-10-RD09**

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**Attachment "A-1"**  
**MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL**  
**(ELECTRICAL RELOCATION PHASE)**  
 Beginning 2000 feet east of Zeirdt Road and continuing east to the Intersection  
 of Martin Road and Rideout Road

2/2/2012

Project No. 65-10-RD09

| ITEM | DESCRIPTION                                                                                                                                                  | BID QTY | BID UNIT | BID PRICE                                            | BID AMOUNT                                          |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------|------------------------------------------------------|-----------------------------------------------------|
| 1    | Utilities Relocation - Overhead Power and UG Communications, to include all removals upon completion. Complete in place, in accordance with plans and specs. | 1       | LS       | <del>1,238,000.00</del><br><del>\$1,300,000.00</del> | <del>1,238,000.00</del><br>\$1,300,000.00 <i>ll</i> |
| 2    | Clearing & Grubbing (Approximately 36 acres), in accordance with ALDOT Spec 201                                                                              | 1       | LS       | <del>138,000.00</del><br><del>\$235,000.00</del>     | <del>138,000.00</del><br>\$235,000.00 <i>ll</i>     |
| 3    | Removing Fence, in accordance with ALDOT Spec 260                                                                                                            | 8296    | LF       | \$1.00                                               | \$8,296.00 ✓                                        |
| 4    | Barbed Wire Fence, in accordance with ALDOT Spec 636                                                                                                         | 8296    | LF       | \$2.25                                               | \$18,666.00 ✓                                       |
| 5    | 430-B Aggregate Surfacing (ALDOT #467, #410 Modified or #57), in accordance with ALDOT Spec 430                                                              | 500     | TON      | \$24.00                                              | \$12,000.00 ✓                                       |
| 6    | Silt Fence, complete in place to include maintenance and removals.                                                                                           | 19439   | LF       | <del>2.00</del><br><del>\$4.00</del>                 | <del>38,878.00</del><br>\$77,756.00 <i>ll</i>       |
| 7    | 740-B Construction Signs, in accordance with ALDOT Spec 740                                                                                                  | 414     | SF       | \$14.00                                              | \$5,796.00 ✓                                        |
| 8    | 740-D Channelizing Drums, in accordance with ALDOT Spec 740                                                                                                  | 200     | EA       | \$65.00                                              | \$13,000.00 ✓                                       |
| 9    | 740-E Cones (36 Inches High), in accordance with ALDOT Spec 740                                                                                              | 100     | EA       | \$20.00                                              | \$2,000.00 ✓                                        |
| 10   | 740-F Barricades, Type III, in accordance with ALDOT Spec 740                                                                                                | 2       | EA       | \$375.00                                             | \$750.00 ✓                                          |
| 11   | 740-I Warning Lights, Type B (Detachable Head), in accordance with ALDOT Spec 740                                                                            | 2       | EA       | \$200.00                                             | \$400.00 ✓                                          |
| 12   | 740-M Ballast For Cone, in accordance with ALDOT Spec 740                                                                                                    | 100     | EA       | \$25.00                                              | \$2,500.00 ✓                                        |
| 13   | Engineering Controls & Construction Staking, in accordance with ALDOT Spec 680                                                                               | 1       | LS       | \$7,200.00                                           | \$7,200.00 ✓                                        |
| 14   | Bonds, Permits, ADEM Monitoring, etc., in accordance with ALDOT Spec 600                                                                                     | 1       | LS       | \$44,000.00                                          | \$44,000.00 ✓                                       |
| 15   | Field Office, ALDOT Type II, in accordance with ALDOT Spec 600                                                                                               | 6       | MO       | \$1,500.00                                           | \$9,000.00 ✓                                        |
| 16   | Mobilization, in accordance with ALDOT Spec 600                                                                                                              | 1       | LS       | \$93,600.00                                          | \$93,600.00 ✓                                       |
| 17   | Digital As-Builts                                                                                                                                            | 1       | LS       | \$5,000.00                                           | \$5,000.00 ✓                                        |
| 18   | Additional Clearing & Grubbing, (to be approved by RSA for use outside EA limits)                                                                            | 5       | AC       | \$5,200.00                                           | \$26,000.00 ✓                                       |
| 19   | Wattle, in accordance with ALDOT Spec 665                                                                                                                    | 2175    | LF       | \$7.00                                               | \$15,225.00 ✓                                       |
| 20   | Temporary Seeding, in accordance with ALDOT Spec 665                                                                                                         | 36      | ACRE     | \$720.00                                             | \$25,920.00 ✓                                       |

**TOTAL BASE BID:**

~~\$1,992,400.00~~

ALL ITEMS SHALL BE CONSIDERED IN-PLACE. PRICES SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, APPURTENANCES OVERHEAD, FEES AND REMOVALS AS REQUIRED FOR CONSTRUCTION OF THE REQUIRED WORK

1,704,231.00 *ll*

**COMPANY** *Christopher Professional Enterprises*  
**SIGNATURE** \_\_\_\_\_  
**DATE** *2/1/12*

**ATTACHMENT "B"**  
**PROPOSAL**

**TO: THE CITY OF HUNTSVILLE**

Public Services Building  
320 Fountain Circle  
Huntsville, Alabama

PROPOSAL OF Christopher Professional Enterprises Inc  
(NAME)  
15891 Reid Rd Athens, AL 35611  
(ADDRESS)

**TO MAKE CERTAIN IMPROVEMENTS ENTITLED:**

**MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL (ELECTRICAL RELOCATION PHASE)**  
**PROJECT NO. 65-10-RD09**

**FOR THE CITY OF HUNTSVILLE, ALABAMA.**

**GENTLEMEN:**

The undersigned bidder has carefully examined the drawings or plans, bid documents, the specifications, the general requirements, the supplement to general requirements, the general terms and conditions, this proposal, the agreement, together with any addenda thereto, and agrees to furnish and deliver all the materials, and to do and perform all the work and labor required to be furnished and delivered, done and performed in and about the improvements as described above and in accordance with certain specifications prepared and approved by the OWNER (City of Huntsville, Alabama). It is **MANDATORY** that any and all addenda be acknowledged by the undersigned bidder, either on page 2 of the Proposal, Attachment "B" or on the outside of the envelope, otherwise, bid shall be rejected.

The undersigned bidder understands that when unit prices are called for, the quantities shown herein are approximate only and are subject to increase or decrease, and offers to do the work whether the quantities are increased, or decreased, at the unit prices stated in the following schedule. The undersigned bidder also understands that when lump sum bids are called for, he will be required to furnish all equipment, labor, material and other items or cost to construct a complete facility. The undersigned bidder further understands that any deletions or additions designated on the outside of the bid envelope, must indicate the particular bid item relative to the deletion or addition, even if the deletion or addition references to deduct or add to the Total Base Bid.

Contractors are authorized to download quantities, Attachment "A", or quantity revisions from COH Engineering website and paste to 3 1/2" floppy disk or CD of their choice; one or the other **must** be submitted with the original bid packet. In addition, two hard copies must be signed and submitted with original bid packet.

Certificates of Insurance are required naming the City as the Certificate Holder. Also, the name of the project and project number should be included on the certificate. The Certificates should reflect the insurance coverage required herein. In addition, a copy of the policy may be requested upon award. The Certificates are to be signed by a person authorized by the insurer to bind coverage on its behalf and must indicate coverage will not be canceled or non-renewed except after thirty (30) days prior written notice to the City at the following address: City of Huntsville, P.O. Box 308, Huntsville, Alabama 35804 ATTN: Penny Kelly.

The undersigned bidder understands that the Contract Time for completion of all work is One Hundred and Eighty (180) calendar days.

**THE UNDERSIGNED BIDDER ALSO AGREES AS FOLLOWS:**

All bonds must be approved by the Mayor and the Clerk-Treasurer of the City of Huntsville. Within fifteen (15) days after the date of acceptance of this proposal by City Council action, the contractor shall execute the contract and furnish to the OWNER a payment (labor and material) bond and a performance bond, each in the amount of 100% of the contract amount. No contract extension will be allowed for delays in the issuance of the notice to proceed that are a result of the contractor failing to submit the required items within the 15 days.



**MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL (ELECTRICAL RELOCATION PHASE)  
PROJECT NO. 65-10-RD09**

It is further understood and agreed that the Contractor shall commence work to be performed under this contract within fifteen (15) days from the date of this contract, unless otherwise instructed in writing by the OWNER. All work shall be carried on continuously to completion.

Accompanying this proposal is a certified check or bid bond in the amount of not less than five percent (5%) of the total amount shown on the schedule of prices not exceeding \$10,000.00 payable to the City of Huntsville, Alabama, which is to be forfeited, as liquidated damages, if, in the event that his proposal is accepted, the undersigned shall fail to execute the contract and furnish a satisfactory contract bond under the conditions and within the time specified in this proposal; otherwise, said certified check or bid bond is to be returned to the undersigned.

DATED: 2/11, 2012.

(IF AN INDIVIDUAL, PARTNERSHIP, OR NON-INCORPORATED ORGANIZATION)  
SIGNATURE OF BIDDER \_\_\_\_\_

BY \_\_\_\_\_

ADDRESS OF BIDDER \_\_\_\_\_

NAMES AND ADDRESSES OF MEMBERS OF THE FIRM:

\_\_\_\_\_  
\_\_\_\_\_

OUR CONTRACTOR'S STATE LICENSE NO. IS 44809

(IF A CORPORATION)  
SIGNATURE OF BIDDER

Magnum C. Will

BY Christopher Professional Enterprises Inc

BUSINESS ADDRESS 15891 Reid Rd Athens GA 30611

INCORPORATED UNDER THE LAWS OF THE STATE OF Alabama

NAMES PRESIDENT Dale Christopher

OF SECRETARY Tony Christopher

OFFICERS TREASURER \_\_\_\_\_

**MANDATORY ACKNOWLEDGEMENT OF ADDENDA:** Addenda will only be faxed to those bidders who attend and have signed in at the pre-bid meeting. It is the responsibility of all bidders to refer to the website for any updates.

1 2

**MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL (ELECTRICAL RELOCATION PHASE)**  
**PROJECT NO. 65-10-RD09**

**All subcontractors must be approved in writing by Owner. The Contractor will be notified in the Notice to Proceed of acceptance of subcontractors. If subcontractors are not approved, Contractor will be notified prior to approval of contract by City Council. Any additional subcontractors needed during the contract period shall be approved by written letter from the Owner.**

[illegible]

ATTACHMENT "D"

**MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL (ELECTRICAL RELOCATION PHASE)**  
**PROJECT NO. 65-10-RD09**

Contractor shall provide at least five (5) references including NAME OF PROJECT, Owner Name, address, phone number and contact name that demonstrates contractor's ability on similar projects.

1. *See attached*

2.

3.

4.

5.

# Christopher Professional Enterprises Inc.

---

Redstone Gateway IB-3  
City of Huntsville  
320 Fountain Circle  
Huntsville, AL 35801  
Chris McNeese  
256-427-5300

Periodic Bid for various construction projects-2003-2005  
City of Huntsville  
320 Fountain Circle  
Huntsville, AL 35801  
256-427-5300

Sanitary Sewer Periodic-Current  
City of Huntsville  
320 Fountain Circle  
Huntsville, AL 35801  
256-427-5300

Squaw Valley Interceptor  
City of Huntsville  
320 Fountain Circle  
Huntsville, AL 35801  
256-427-5300  
Shane Cook

Nance Rd Improvements  
City of Huntsville  
320 Fountain Circle  
Huntsville, AL 35801  
256-427-5300  
Toneka Lindsey

Western Area Inceptor Ph 4 Contract A  
City of Huntsville  
320 Fountain Circle  
Huntsville, AL 35801  
256-427-5300  
Kathy Martin

Western Area Inceptor Ph 4 Contract B  
City of Huntsville  
320 Fountain Circle  
Huntsville, AL 35801  
256-427-5300  
Kathy Martin

Fagan Creek Relocation  
City of Huntsville  
320 Fountain Circle  
Huntsville, AL 35801  
256-427-5300

Williams Ave Realign  
City of Huntsville  
320 Fountain Circle  
Huntsville, AL 35801  
256-427-5300



ATTACHMENT "E"

**MANDATORY** Pre-bid meeting to be held on Tuesday, January 24, 2012 at 9:00 a.m. at the City of Huntsville Public Services Building, 320 Fountain Circle, in the 1st Floor in the Conference Room. Bidders must attend this pre-bid meeting in order to be eligible to submit a bid. A site visit will be required after the meeting.

**NOTICE TO CONTRACTORS - REVISED ADVERTISEMENT**

**WANTED:** Sealed bids in duplicate for the construction of: Martin Road Improvements on Redstone Arsenal (Electrical Relocation Phase), more particularly known as Project No. 65-10-RD09. Pre-Qualification by bidders will be required with the Pre-Qualification Statement submitted by 5:00 PM on Wednesday, January 18, 2012 and responses issued by 5:00 PM on Friday, January 20, 2012. Pre-Qualification criteria and a copy of the Pre-Qualification Statement are available for downloading on the City Engineering website: [www.huntsvilleal.gov/engineering](http://www.huntsvilleal.gov/engineering).

**Description of Project:** Relocation of approx. 2.5 miles of electrical/communication lines along Martin Road, between Zierdt Road and Rideout Road on Redstone Arsenal, Alabama.

The attention of all bidders is called to Code of Alabama §§ 34-8-1 and 34-8-2 (1975) and 34-8-1, 34-8-2, 34-8-4, 34-8-6, 34-8-7, 34-8-8 and 34-8-9(amended 1996) setting forth the definition of general contractor and the licensing procedures and requirements for state licensing. A copy of the above Codes may be obtained from the OWNER (City of Huntsville). No one is entitled to bid and no contract may be awarded to anyone who does not possess a valid general contractor's license and the required classification for the municipal type work to be performed. The general contractor's license and classification must appear on the outside of the bid envelope along with the general contractors name and address, project name and number and date and time of bid opening. Section 39-3-5 Code of Alabama has been amended as follows:

"In awarding the Contract, preference will be given to Alabama resident contractors and a nonresident bidder domiciled in a state having laws granting preference to local contractors shall be awarded the Contract only on the same basis as the nonresident bidder's state awards contracts to Alabama contractors bidding under similar circumstances."

After proposals are opened and read, they will be compared on the basis of the summation of the products or approximate quantities shown in Attachment "A", multiplied by the unit bid prices. In the event of a discrepancy between unit bid prices and extensions, the unit bid price shall govern. A proposal will not be considered unless signed by the bidder or his authorized agent and accompanied by cashier's check or properly signed bid bond, as required by law.

In determining the successful bidder, the Owner will consider in addition to the bid prices, such responsibility factors as characteristics and responsibility, skill, experience, record of integrity in business, and of performance offered and past record of performance on Owner contracts on other similar projects. Any other factors not specifically mentioned or provided for herein, in addition to that of the bid price which would affect the final cost of the Owner, will be taken into consideration in making award of contract. The right is reserved to reject any bid where investigation of the business and technical organization of the bidder available for the contemplated work, including financial resources, equipment, and experience on similar projects does not satisfy the Owner that such bidder is qualified to perform the work. The City Council of the City of Huntsville reserves the right to reject any and all bids and to waive informalities.

Separate sealed bids for the construction of this project will be received at the City of Huntsville Public Services Building, 320 Fountain Circle, in the 1st Floor Conference Room, on the 1st day of February, 2012, until 2:00 p.m. Each bid shall be accompanied by Bid Bond in the amount of five percent of the bid. Quantities are known as Attachment "A". No bidder may withdraw his bid within ninety (90) days after the actual date of opening.

These Addenda, Special Provisions, Plans, the Supplement to General Requirements for Construction of Public Improvements City of Huntsville Specifications, Standard Specifications for Construction of Public Improvements Contract Projects and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complimentary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions, unless obviously incorrect, shall govern over scaled dimensions. Plans shall govern over Supplemental Specifications, Supplemental Specifications shall govern over the Standard Specifications for Construction of Public Improvements Contract Projects. Special Provisions shall govern over Standard Specifications for Construction of Public Improvements Contract Projects, Supplemental Specifications. Standard Specifications for Construction of Public Improvements Contract Projects and Engineering Standards are available at no charge by downloading from the City Engineering website: [www.huntsvilleal.gov/engineering](http://www.huntsvilleal.gov/engineering) Plans and proposals can be downloaded from our website at no cost: [www.huntsvilleal.gov/engineering/bidlist.html](http://www.huntsvilleal.gov/engineering/bidlist.html) Contractors will be responsible for costs of duplicating their own plans and can choose a photocopying facility of their choice.

Additionally, Contractors are responsible for checking website for any revisions/updates. Contractor is required to submit pricing on either a 3 1/2" floppy disk or CD in the Excel format provided by the COH (Attachment "A") and made available for download from the Engineering website. The bid or the CD must be in working condition and included with original bid packet and reflect the correct revision, along with two signed hard copies. Failure to do so shall be cause for rejection of bid. If a price discrepancy is found on bid disk or CD, printed hard copy prices submitted with original bid documents, with Contractor signature, will prevail.

#### E-VERIFY - CONDITIONS

The Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, *Code of Alabama (1975) § 31-13-1 through 31-13-30* (also known as and hereinafter referred to as "the Alabama Immigration Act") is applicable to contracts with the City of Huntsville. As a condition for the award of a contract and as a term and condition of the contract with the City of Huntsville, in accordance with § 31-13-9 (a) of the Alabama Immigration Act, any business entity or employer that employs one or more employees shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien and shall attest to such by sworn affidavit signed before a notary. Such business entity or employer shall provide a copy of such affidavit to the City of Huntsville as part of its bid or proposal for the contract along with a copy of the Memorandum of Understanding as documentation establishing that the business entity or employer is enrolled in the E-Verify program. The required affidavit forms for the contractor and for subcontractors are included in the project specifications.

During the performance of the contract, such business entity or employer shall participate in the E-Verify program and shall verify every employee that is required to be verified according to the applicable federal rules and regulations. The business entity or employer shall assure that these requirements are required of every subcontractor in accordance with §31-13-9(c) and shall maintain records that are available upon request by the City, state authorities or law enforcement to verify compliance with the requirements of the Alabama Immigration Act. Failure to comply with these requirements may result in breach of contract, termination of the contract or subcontract, and possibly suspension or revocation of business licenses and permits in accordance with §31-13-9 (e) (1) & (2) or in the case of a subcontractor, in accordance with §31-13-9 (f) (1) & (2).

ALABAMA IMMIGRATION ACT (Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, *Code of Alabama (1975)*) Compliance with the requirements of the (Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, *Code of Alabama (1975) § 31-13-1 through 31-13-30*, commonly referred to as the Alabama Immigration Law, is required for City of Huntsville, Alabama contracts as a condition of the contract performance. The Contractor shall submit in the bid package, with the requested information included on the form, the "City of Huntsville, Alabama Report of Ownership Form". The bidder selected for award of the contract may be required to complete additional forms relating to citizenship or alien status of the bidder and its employees, including e-verify information, prior to award of a contract.

Revised: 1/6/12

# ATTACHMENT "F"

## REQUEST FOR PAYMENT CITY OF HUNTSVILLE ENGINEERING DIVISION

PROJECT NAME AND NUMBER:

ESTIMATE NUMBER:

ONE (1)

PERIOD FROM:

03/11/05

TO

CONTRACT DURATION

0 DAYS

START DATE:

03/11/05

END DATE:

3/11/05

TOTAL CONTRACT TIME (3) 0 DAYS

REFER TO COM SUPPLEMENT  
TO GENERAL REQUIREMENTS:  
CHANGE ORDERS - CHANGE  
TO CONTRACT TIME

TIME C.O. #1 DAYS ADDED  
TIME C.O. #2 DAYS ADDED

0

0

CONTRACT DAYS REMAINING 0

TOTAL CONTRACT AMOUNT (1)

AS AWARDED

\$ 200,000.00

CURRENT \$ 200,000.00

C.O. #1 \$

C.O. #2 \$

TOTAL AMOUNT EARNED TO DATE LESS STORED MATERIALS (2):

\$ -

MATERIAL STORED (INVOICE ATTACHED)

\$ -

RETAINAGE (5%) OF 50% OF CONTRACT

Amount is in accordance with ALDOT and COM specifications and is based on the contract amount before change orders.

\$ -

AMOUNT EARNED AFTER RETAINAGE

\$ -

LIQUIDATED DAMAGES PER DAY

300

LIQUIDATED DAMAGES ASSESSED TO DATE:

FOR QUESTIONS RELATED TO PAYMENT  
CALCULATIONS, LIQUIDATED DAMAGES, AND  
CHANGE ORDER REQUIREMENTS, PLEASE REFERENCE  
YOUR CONTRACT  
SUPPLEMENT TO GENERAL REQUIREMENTS SECTION  
4. CHANGE ORDERS  
12. PAYMENT.  
AS LIQUIDATED DAMAGES

Damages, if applicable, will automatically be calculated by  
subtracting the contract and date from the invoice period and date  
and multiplying the days by the daily damages amount. Damages  
will automatically be deducted from amounts otherwise due.

TOTAL AMOUNT PREVIOUSLY APPROVED TO DATE:

\$ -

AMOUNT DUE THIS ESTIMATE WITHOUT LIQUIDATED DAMAGES

\$ -

A: % OF TIME ELAPSED:

TIME ELAPSED TO DATE

TOTAL CONTRACT TIME (3)

0

DAYS  
DAYS

=

B: PROJECT COMPLETION:

TOTAL EARNED TO DATE (2)

TOTAL CONTRACT AMOUNT

200,000.00

=

0%

C: PROGRESS OF WORK:

B - A: =

### CONTRACTORS CERTIFICATE

I, \_\_\_\_\_, the duly qualified, acting and authorized agent for the contractor  
on the above project, do hereby certify that we have performed all of the work set forth in strict accordance with the plans, specifications, laws and ordinances applicable thereto,  
and do further certify that all materials, labor, and equipment listed herein have been paid for in full as allowed on all prior estimates and if requested to do so, we will show evidence of  
payment for the same in writing before the final payment of this estimate. We further certify that the amount received hereunder is considered  
compensation and final payment in full for all work performed under the contract, including any amendments thereto and, upon payment of said sum, hereby release the Owner,  
its employees, agents, and representatives in accordance with said contract. We further certify that we fully guarantee all work performed hereunder for a period of twelve  
months from the date of payment of the final estimate (in accordance with the terms of our original contract and all amendments thereto), during which time all terms and  
conditions of the original contract document shall remain in full force and effect, including the insurance requirements, Hold Harmless Agreement, and Indemnifying Agreement  
as contained in said contract documents.

CERTIFIED FOR PAYMENT ON THIS THE \_\_\_\_\_

DAY OF \_\_\_\_\_

BY: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

TITLE: \_\_\_\_\_

SIGNED: \_\_\_\_\_

WITNESS: \_\_\_\_\_

SIGNATURE

We have checked the quantities and extensions to this estimate, and to the best of our knowledge, the estimate is true and correct.

### APPROVED FOR PAYMENT

BY: \_\_\_\_\_

CONSTRUCTION INSPECTOR

BY: \_\_\_\_\_

SHANE DAVIS, CITY ENGINEER  
OR RON ADAMS, DEPUTY CITY ENGINEER  
OR LYNN MAJORS, ADMINISTRATIVE OFFICER

BY: \_\_\_\_\_

PROJECT ENGINEER

IF FINAL ESTIMATE, DATE WORK WAS  
COMPLETED: \_\_\_\_\_

## **ATTACHMENT "G"**

All vendors/contractors are required to submit a Federal Tax Form W-9 to City of Huntsville at the time a contract is awarded, unless vendor/contractor is already registered and doing business with the City. No payments of invoices can be made until this W-9 Tax Form has been properly submitted. A copy of the W-9 Tax Form can be obtained at the following website: [www.irs.ustreas.gov/pub/irs-pdf/fw9.pdf](http://www.irs.ustreas.gov/pub/irs-pdf/fw9.pdf)

## ATTACHMENT "H"

## CITY OF HUNTSVILLE, ALABAMA REPORT OF OWNERSHIP FORM

## A. General Information. Please provide the following information:

- Legal name(s) (include "doing business as", if applicable): Christopher Professional Enterprises Inc
- City of Huntsville current taxpayer identification number (if available): 37501  
(Please note that if this number has been assigned by the City and if you are renewing your business license, the number should be listed on the renewal form.)

## B. Type of Ownership. Please complete the un-shaded portions of the following chart by checking the appropriate box below and entering the appropriate Entity I.D. Number, if applicable (for an explanation of what an entity number is, please see paragraph C below):

| Type of Ownership<br>(check appropriate box)                                | Entity I. D. Number<br>& Applicable State                             | Immigration Law Applies                                                    |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> Individual or Sole Proprietorship                  | Not Applicable                                                        | Yes                                                                        |
| <input type="checkbox"/> General Partnership                                | Not Applicable                                                        | Yes for each partner who is an individual                                  |
| <input type="checkbox"/> Limited Partnership (LP)                           | Number & State:                                                       | No, if an LP formed by filing with applicable state office                 |
| <input type="checkbox"/> Limited Liability Partnership (LLP)                | Number & State:                                                       | No, if an LLP formed by filing or registering with applicable state office |
| <input type="checkbox"/> Limited Liability Company (LLC)<br>(Single Member) | Number & State:                                                       | No                                                                         |
| <input type="checkbox"/> LLC (Multi-Member)                                 | Number & State:                                                       | No                                                                         |
| <input checked="" type="checkbox"/> Corporation                             | Number & State:<br><u>260-331 AL</u>                                  | No                                                                         |
| <input type="checkbox"/> Other, please explain:                             | Number & State:<br><br>(if a filing entity under state law)<br>State: | To be determined                                                           |

- C. **Entity I.D. Numbers.** If an Entity I.D. Number is required and if the business entity is registered in this state, the number is available through the website of Alabama's Secretary of State at [www.sos.state.al.us](http://www.sos.state.al.us), under "Government Records". If a foreign entity is not registered in this state please provide the Entity I.D. number (or other similar number by whatever named called) assigned by the state of formation along with the name of the state.
- D. **Formation Documents.** Please note that, with regard to entities, the entity's formation documents, including articles or certificates of incorporation, organization, or other applicable formation documents, as recorded in the probate records of the applicable county and state of formation, are not required unless: (1) specifically requested by the City, or (2) an Entity I.D. Number is required and one has not been assigned or provided.
- E. **Immigration Law.** Please note that each owner who is an Individual, as identified in the last column of the chart above, must provide proof of U.S. Citizenship or lawful alien presence in accordance with Ala. Act 2011-535 by completing the applicable forms, as provided by the City. In the case of a partnership whose partners are individuals that must be verified, you are requested to please provide a copy of the Partnership Agreement or other appropriate documentation evidencing the names of each Individual who is a partner in the partnership.

Please date and sign this form in the space provided below and either write legibly or type your name under your signature. If you are signing on behalf of an entity please insert your title as well.

Signature: Maggie C. WilliamsTitle (if applicable): SecretaryType or legibly write name: Maggie WilliamsDate: 2/1/12



**ATTACHMENT "I"**  
**ELECTRICAL WORK SPECIFICATIONS**

SECTION 33 05 16

CONCRETE POLES  
08/08

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN CONCRETE INSTITUTE INTERNATIONAL (ACI)

ACI 211.1

(1991; R 2009) Standard Practice for  
Selecting Proportions for Normal,  
Heavyweight and Mass Concrete

ACI 318M

(2008; Errata 2010) Building Code  
Requirements for Structural Concrete &  
Commentary

ASTM INTERNATIONAL (ASTM)

ASTM A416/A416M

(2010) Standard Specification for Steel  
Strand, Uncoated Seven-Wire for  
Prestressed Concrete

ASTM A421/A421M

(2010) Standard Specification for Uncoated  
Stress-Relieved Steel Wire for Prestressed  
Concrete

ASTM A615/A615M

(2009b) Standard Specification for  
Deformed and Plain Carbon-Steel Bars for  
Concrete Reinforcement

ASTM A706/A706M

(2009b) Standard Specification for  
Low-Alloy Steel Deformed and Plain Bars  
for Concrete Reinforcement

ASTM A82/A82M

(2007) Standard Specification for Steel  
Wire, Plain, for Concrete Reinforcement

ASTM A966/A966M

(2008) Standard Test Method for Magnetic  
Particle Examination of Steel Forgings  
Using Alternating Current

ASTM C 150/C 150M

(2011) Standard Specification for Portland  
Cement

ASTM C 33/C 33M

(2011) Standard Specification for Concrete  
Aggregates

ASTM C 494/C 494M

(2010a) Standard Specification for  
Chemical Admixtures for Concrete

|                   |                                                                                                          |
|-------------------|----------------------------------------------------------------------------------------------------------|
| ASTM C 595/C 595M | (2010) Standard Specification for Blended Hydraulic Cements                                              |
| ASTM C 618        | (2008a) Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete |
| ASTM C 989        | (2010) Standard Specification for Slag Cement for Use in Concrete and Mortars                            |
| ASTM C260/C260M   | (2010a) Standard Specification for Air-Entraining Admixtures for Concrete                                |

PRECAST/PRESTRESSED CONCRETE INSTITUTE (PCI)

|             |                                                                                                                  |
|-------------|------------------------------------------------------------------------------------------------------------------|
| PCI MNL-116 | (1999) Manual for Quality Control for Plants and Production of Structural Precast Concrete Products, 4th Edition |
| PCI MNL-120 | (2010) PCI Design Handbook - Precast and Prestressed Concrete, 6th Edition                                       |

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted:

Design Data

Concrete mix design

Certificates

Quality control procedures

1.3 QUALITY ASSURANCE

1.3.1 Concrete Poles

Provide precast concrete poles or precast prestressed poles for use in overhead steam distribution systems. Precast prestressed concrete poles or precast concrete poles shall be the product of a manufacturer specializing in the production of precast concrete members. Prestressed concrete poles shall be designed in accordance with PCI MNL-120 or precast concrete poles shall be designed with section properties equivalent to those of the prestressed concrete poles. Produce poles in one piece, and in accordance with PCI MNL-116.

1.3.2 Modification of References

In the ACI publications, consider the advisory provisions to be mandatory, as though the word "shall" had been substituted for "should" wherever it appears. Interpret references to the "building official," "Structural Engineer," and "Architect/Engineer" to mean the Contracting Officer.

### 1.3.3 Design Requirement

At least 30 calendar days prior to concrete placement, submit a mix design for each strength and type of concrete. Submit a complete list of materials including type; brand; source and amount of cement, fly ash, pozzolan, ground slag, and admixtures; and applicable reference specification. Submit copies of test reports showing that the mix has been successfully tested to produce concrete with the properties specified and is suitable for the job conditions. Furnish fly ash and pozzolan test results performed within 6 months of submittal date. Obtain approval before concrete placement. An identical concrete mix design previously approved within the past 12 months by Redstone Arsenal Division, , may be used without further approval, if copies of the previous approval and fly ash and pozzolan test results are submitted. Obtain acknowledgement of receipt of test results prior to concrete placement. Submit additional data regarding concrete aggregates if the source of aggregate changes.

### 1.3.4 Certificates: Procedure Requirement

Submit the precasting manufacturer's quality control procedures established in accordance with PCI MNL-116.

## PART 2 PRODUCTS

### 2.1 CONCRETE

ACI 211.1 or ACI 318M for Contractor furnished mix design. The minimum compressive strength of concrete at 28 days shall be 5000 psi , unless otherwise indicated.

### 2.2 CEMENT

ASTM C 150/C 150M, Type I, II, or III, or ASTM C 595/C 595M, Type IP or IS blended cement, except as modified herein. The blended cement shall consist of a mixture of ASTM C 150/C 150M cement and one of the following materials: ASTM C 618 pozzolan or fly ash, or ASTM C 989 ground iron blast-furnace slag. The pozzolan or fly ash content shall not exceed 25 percent by weight of the total cementitious material and the ground iron blast-furnace slag shall not exceed 50 percent by weight of total cementitious material.

#### 2.2.1 Fly Ash and Pozzolan

ASTM C 618, Type N, F, or C, except that the maximum allowable loss on ignition shall be 6 percent for Types N and F.

#### 2.2.2 Ground Iron Blast-Furnace Slag

ASTM C 989, Grade 100 or 120.

### 2.3 WATER

Provide fresh, clean and potable water.

### 2.4 AGGREGATES

ASTM C 33/C 33M, Size 57, 67, or 7. Aggregates shall not contain any

substance which may be deleteriously reactive with the alkalies in the cement.

## 2.5 ADMIXTURES

ASTM C 494/C 494M, except that air entraining shall conform to ASTM C260/C260M.

## 2.6 REINFORCEMENT

### 2.6.1 Reinforcing Bars

ASTM A615/A615M, Grade 60, ASTM A966/A966M Grade 60; ASTM A966/A966M Grade 60; or ASTM A706/A706M.

### 2.6.2 Ties and Spirals

Steel, ASTM A82/A82M.

### 2.6.3 Prestressing Steel

Seven-wire stress-relieved strand conforming to ASTM A416/A416M or stress-relieved wire conforming to ASTM A421/A421M, Type WA. The minimum ultimate strength shall be 250,000 psi. Prestressing steel shall be free from grease, oil, wax, paint, soil, dirt, loose rust, kinks, bends, or other defects.

## PART 3 EXECUTION

### 3.1 PREPARATION

Prior to installation of poles, check for damage, such as cracking, spalling, and honeycombing. Reject members which contain honeycombed sections deep enough to expose reinforcing steel. Reject structurally impaired prestressed members. Provide a PCI MNL-116 commercial grade finish.

### 3.2 INSTALLATION

#### 3.2.1 Pole Placement

##### 3.2.1.1 Augering

Poles shall be set in augered holes with a diameter 6 inches larger than the concrete pole. Fill augered hole around pole with air-entrained concrete having a minimum compressive strength of 3000 psi at 28 days and finish in a dome. Cure concrete a minimum of 72 hours before performing further work on poles.

### 3.3 PROTECTION OF POLES

Take care to avoid damage to poles during handling .

-- End of Section --

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SECTION 33 71 01

OVERHEAD TRANSMISSION AND DISTRIBUTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASME INTERNATIONAL (ASME)

ASME B16.11 (2005) Forged Fittings, Socket-Welding and Threaded

ASTM INTERNATIONAL (ASTM)

ASTM A 123/A 123M (2008) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ASTM A 153/A 153M (2005) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM A 167 (1999; R 2004) Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip

ASTM A 36/A 36M (2008) Standard Specification for Carbon Structural Steel

ASTM A 475 (2003) Standard Specification for Zinc-Coated Steel Wire Strand

ASTM A 53/A 53M (2007) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless

ASTM A 575 (1996; R 2007) Standard Specification for Steel Bars, Carbon, Merchant Quality, M-Grades

ASTM A 576 (1990b; R 2006) Standard Specification for Steel Bars, Carbon, Hot-Wrought, Special Quality

ASTM B 1 (2001; R 2007) Standard Specification for Hard-Drawn Copper Wire

|                   |                                                                                                                               |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------|
| ASTM B 117        | (2007a) Standing Practice for Operating Salt Spray (Fog) Apparatus                                                            |
| ASTM B 2          | (2008) Standard Specification for Medium-Hard-Drawn Copper Wire                                                               |
| ASTM B 230/B 230M | (2007) Standard Specification for Aluminum 1350-H19 Wire for Electrical Purposes                                              |
| ASTM B 231/B 231M | (2004) Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors                                            |
| ASTM B 232/B 232M | (2001e1) Standard Specification for Concentric-Lay-Stranded Aluminum Conductors, Coated-Steel Reinforced (ACSR)               |
| ASTM B 3          | (2001; R 2007) Standard Specification for Soft or Annealed Copper Wire                                                        |
| ASTM B 398/B 398M | (2002; R 2007) Standard Specification for Aluminum-Alloy 6201-T81 Wire for Electrical Purposes                                |
| ASTM B 399/B 399M | (2004) Standard Specification for Concentric-Lay-Stranded Aluminum-Alloy 6201-T81 Conductors                                  |
| ASTM B 8          | (2004) Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft                       |
| ASTM D 117        | (2002) Standard Guide for Sampling, Test Methods, Specifications and Guide for Electrical Insulating Oils of Petroleum Origin |
| ASTM D 1654       | (2008) Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments                                          |
| ASTM D 709        | (2001; R 2007) Laminated Thermosetting Materials                                                                              |

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

|             |                                                                                                    |
|-------------|----------------------------------------------------------------------------------------------------|
| IEEE C135.1 | (1999) Standard for Zinc-Coated Steel Bolts and Nuts for Overhead Line Construction                |
| IEEE C135.2 | (1999) Threaded Zinc-Coated Ferrous Strand-Eye Anchor Rods and Nuts for Overhead Line Construction |

IEEE C135.22 (1988) Zinc-Coated Ferrous Pole-Top Insulator Pins with Lead Threads for Overhead Line Construction

IEEE C2 National Electrical Safety Code

IEEE C37.32 (2002) High-Voltage Switches, Bus Supports, and Accessories - Schedules of Preferred Ratings, Construction Guidelines and Specifications

IEEE C37.41 (2000) Design Tests for High-Voltage Fuses, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Accessories

IEEE C37.42 (1996) High Voltage Expulsion Type Distribution Class Fuses, Cutouts, Fuse Disconnecting Switches and Fuse Links\*\*

IEEE C62.11 (2005; Amendment A 2008) Standard for Metal-Oxide Surge Arresters for Alternating Current Power Circuits (>1kV)

IEEE Std 100 (2000) The Authoritative Dictionary of IEEE Standards Terms

INTERNATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)

NETA ATS (2003) Acceptance Testing Specifications

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA C135.4 (1987) Zinc-Coated Ferrous Eyebolts and Nuts for Overhead Line Construction

NEMA C29.2 (1992; R 1999) Standard for Insulators - Wet-Process Porcelain and Toughened Glass - Suspension Type

NEMA C29.3 (1986; R 2002) Standard for Wet Process Porcelain Insulators - Spool Type

NEMA C29.4 (1989; R 2002) Standard for Wet-Process Porcelain Insulators - Strain Type

NEMA C29.5 (1984; R 2002) Wet-Process Porcelain Insulators (Low and Medium Voltage Pin Type)

NEMA C29.7 (1996; 2002) Standard for Wet Process Porcelain Insulators - High-Voltage Line Post Type

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70

National Electrical Code - 2011 Edition

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD)

OECD Test 203

(1992) Fish Acute Toxicity Test

U.S. DEPARTMENT OF AGRICULTURE (USDA)

RUS 202-1

(2004) List of Materials Acceptable for  
Use on Systems of RUS Electrification  
Borrowers

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 600/4-90/027F

(1993) Methods for Measuring the Acute  
Toxicity of Effluents and Receiving Waters  
to Freshwater and Marine Organisms

UNDERWRITERS LABORATORIES (UL)

UL 467

(2007) Standard for Grounding and Bonding  
Equipment

UL 486A-486B

(2003; Rev thru Aug 2006) Standard for  
Wire Connectors

UL 510

(2005; Rev thru Aug 2005) Polyvinyl  
Chloride, Polyethylene, and Rubber  
Insulating Tape

UL 6

(2007) Standard for Electrical Rigid Metal  
Conduit-Steel

## 1.2 DEFINITIONS

- a. Unless otherwise specified or indicated, electrical and electronics terms used in these specifications, and on the drawings, shall be as defined in IEEE Std 100.

## 1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted

SUBMITTAL PROCEDURES:

SD-03 Product Data

Conductors; G

Insulators; G

Concrete poles; G

Cutouts; G

Surge arresters; G

Guy strand

Anchors

Design Data

Concrete poles; G

Submit report of the acceptance test results as specified by paragraph entitled "Field Quality Control"

Certificates

Concrete poles; G

#### 1.4 QUALITY ASSURANCE

##### 1.4.1 Regulatory Requirements

In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, "shall" had been substituted for "should" wherever it appears. Interpret references in these publications to the "authority having jurisdiction," or words of similar meaning, to mean the Contracting Officer. Equipment, materials, installation, and workmanship shall be in accordance with the mandatory and advisory provisions of NFPA 70 and IEEE C2 unless more stringent requirements are specified or indicated.

##### 1.4.2 Standard Products

Provide materials and equipment that are products of manufacturers regularly engaged in the production of such products which are of equal material, design and workmanship. Products shall have been in satisfactory commercial or industrial use for 2 years prior to bid opening. The 2-year period shall include applications of equipment and materials under similar circumstances and of similar size. The product shall have been on sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the 2-year period. Where two or more items of the same class of equipment are required, these items shall be products of a single manufacturer; however, the component parts of the item need not be the products of the same manufacturer unless stated in this section.

##### 1.4.2.1 Alternative Qualifications

Products having less than a 2-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 6000 hours, exclusive of the manufacturers' factory or laboratory tests, is furnished.

##### 1.4.2.2 Material and Equipment Manufacturing Date



Products manufactured more than 3 years prior to date of delivery to site shall not be used, unless specified otherwise.

#### 1.4.3 Ground Resistance Test Reports

Submit the measured ground resistance of grounding system. When testing grounding electrodes and grounding systems, identify each grounding electrode and each grounding system for testing. Include the test method and test setup (i.e. pin location) used to determine ground resistance and soil conditions at the time the measurements were made.

#### 1.5 MAINTENANCE

##### 1.5.1 Additions to Operations and Maintenance Data

In addition to requirements of Data Package 5, include the following in the operation and maintenance manuals provided:

- a. Assembly and installation drawings
- b. Prices for spare parts and supply list
- c. Date of purchase

#### 1.6 DELIVERY, STORAGE, AND HANDLING

Devices and equipment shall be visually inspected by the Contractor when received and prior to acceptance from conveyance. Stored items shall be protected from the environment in accordance with the manufacturer's published instructions. Damaged items shall be replaced.

#### 1.7 WARRANTY

The equipment items shall be supported by service organizations which are reasonably convenient to the equipment installation in order to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.

### PART 2 PRODUCTS

#### 2.1 MATERIALS AND EQUIPMENT

Consider materials specified herein or shown on contract drawings which are identical to materials listed in RUS 202-1 as conforming to requirements. Equipment and component items, not hot-dip galvanized or porcelain enamel finished, shall be provided with corrosion-resistant finishes which shall withstand 480 hours of exposure to the salt spray test specified in ASTM B 117 without loss of paint or release of adhesion of the paint primer coat to the metal surface in excess of 1/16 inch from the test mark. The described test mark and test evaluation shall be in accordance with ASTM D 1654 with a rating of not less than 7 in accordance with TABLE 1, (procedure A). Cut edges or otherwise damaged surfaces of hot-dip galvanized sheet steel or mill galvanized sheet steel shall be coated with a zinc rich paint conforming to the manufacturer's standard.

#### 2.2 POLES

Poles shall be of lengths and strengths indicated.

#### 2.2.1 Concrete Poles

Concrete poles shall be designed to withstand the loads specified in IEEE C2 multiplied by the appropriate overload capacity factors. Poles shall be reinforced or prestressed, either cast or spun. Spun poles shall be manufactured by a centrifugal spinning process with concrete pumped into a polished round tapered metal mold. Concrete for spun poles shall have a compressive strength of at least 5000 psi at 28 days; steel wire shall have an ultimate tensile strength of at least 120,000 psi; and reinforcing bars shall have an ultimate tensile strength of at least 40,000 psi. After the high speed spinning action is completed, a spun pole shall be cured by a suitable wet steam process. Spun poles shall have a water absorption of not greater than three percent to eliminate cracking and to prevent erosion. Concrete poles shall have hollow shafts. Poles shall have a hard, smooth, nonporous surface that is resistant to soil acids, road salts, and attacks of water and frost. Poles shall not be installed for at least 15 days after manufacture. Fittings and brackets that conform to the concrete pole design shall be provided. Poles shall conform to strength calculations performed by a registered professional engineer and submitted in accordance with design data portion of paragraph entitled "SUBMITTALS." Provide certification, from the manufacturer, that the technical requirements of this specification shall be met.

#### 2.3 CROSSARMS AND BRACKETS

##### 2.3.1 Fiberglass Crossarms

Conform to RUS standards. Crossarms shall be UV stabilized pultruded fiberglass tube, distribution type, and a 45 degree chamfer on all top edges. Crossarms shall be machined, chamfered, trimmed, and bored for stud and bolt holes. Factory drilling shall be provided for pole and brace mounting, for four pin or four vertical line-post insulators, and for four suspension insulators, except where otherwise indicated or required. Drilling shall provide required climbing space and wire clearances.

#### 2.4 HARDWARE

Hardware shall be hot-dip galvanized in accordance with ASTM A 153/A 153M and ASTM A 123/A 123M.

Zinc-coated hardware shall comply with IEEE C135.1, IEEE C135.2, NEMA C135.4, ANSI C135.14 IEEE C135.22. Steel hardware shall comply with ASTM A 575 and ASTM A 576. Pole-line hardware shall be hot-dip galvanized steel, except anchor rods of the copper-molten welded-to-steel type with nonferrous corrosion-resistant fittings shall be used. Washers shall be installed under boltheads and nuts on wood surfaces and elsewhere as required. Washers used on through-bolts and double-arming bolts shall be approximately 2-1/4 inches square and 3/16 inch thick. The diameter of holes in washers shall be the correct standard size for the bolt on which a washer is used. Washers for use under heads of carriage-bolts shall be of the proper size to fit over square shanks of bolts. Eye bolts, bolt eyes, eyenuts, strain-load plates, lag screws, guy clamps, fasteners, hooks, shims, and clevises shall be used wherever required to support and to protect poles, brackets, crossarms, guy wires, and insulators.

#### 2.5 INSULATORS

Provide wet-process porcelain insulators which are radio interference free.

- a. Line post type insulators: NEMA C29.7, Class 57-1L.
- b. Suspension insulators: NEMA C29.2 , Quantity per Phase, 2, Class 52-1 or 52-9.
- c. Spool insulators: NEMA C29.3, Class 53-2.
- d. Guy strain insulators: NEMA C29.4, Class 54-2, except provide fiberglass type when used with underground terminal or when other interference problems exist.
- e. Pin insulators: NEMA C29.5, Class 55-3.

## 2.6 OVERHEAD CONDUCTORS, CONNECTORS AND SPLICES

Conductors of bare aluminum conductor steel reinforced (ACSR) of sizes and types indicated. Where aluminum conductors are connected to dissimilar metal, fittings conforming to UL 486A-486B shall be used.

### 2.6.1 Aluminum Conductor Steel Reinforced (ACSR)

ASTM B 232/B 232M, aluminum.

### 2.6.2 Connectors and Splices

Connectors and splices shall be of copper alloys for copper conductors, aluminum alloys for aluminum-composition conductors, and a type designed to minimize galvanic corrosion for copper to aluminum-composition conductors. Aluminum-composition, aluminum-composition to copper, and copper-to-copper shall comply with UL 486A-486B.

## 2.7 GUY STRAND

ASTM A 475, high-strength , Class A or B, galvanized strand steel cable. Guy strand shall be 3/8 inch in diameter with a minimum breaking strength of 10,800 pounds. Provide guy terminations designed for use with the particular strand and developing at least the ultimate breaking strength of the strand.

## 2.8 ROUND GUY MARKERS

Vinyl or PVC material, yellow colored, 8 feet long and shatter resistant at sub-zero temperatures.

### 2.8.1 Guy Attachment

Thimble eye guy attachment.

## 2.9 ANCHORS AND ANCHOR RODS

Anchors shall present holding area indicated on drawings as a minimum. Anchor rods shall be triple thimble-eye, 3/4 inch diameter by 8 feet long. Anchors and anchor rods shall be hot dip galvanized.

### 2.9.1 Screw Anchors

Screw type anchors having a manufacturer's rating at least equal to rating indicated and extra heavy pipe rods conforming to ASTM A 53/A 53M, Schedule 80, and couplings conforming to ASME B16.11, fitting Class 6000.

## 2.10 GROUNDING AND BONDING

### 2.10.1 Driven Ground Rods

Provide copper-clad steel ground rods conforming to UL 467 not less than 3/4 inch in diameter by 10 feet in length. Sectional type rods may be used for rods 20 feet or longer.

### 2.10.2 Grounding Conductors

ASTM B 8. Provide soft drawn copper wire ground conductors a minimum No. 4 AWG. Ground wire protectors shall be PVC.

### 2.10.3 Grounding Connections

UL 467. Exothermic weld or compression connector.

## 2.11 SURGE ARRESTERS

IEEE C62.11, metal oxide, polymeric-housed, surge arresters arranged for crossarm mounting. RMS voltage rating shall be 9 kV. Arresters shall be Distribution class.

## 2.12 FUSED CUTOUTS

Open type fused cutouts rated 100 amperes and 10,000 amperes symmetrical interrupting current at 15 kV ungrounded, conforming to IEEE C37.42. Type K fuses conforming to IEEE C37.42 with ampere ratings equal to 150 percent of the transformer full load rating. Open link type fuse cutouts are not acceptable.

## 2.13 CONDUIT RISERS AND CONDUCTORS

The riser shield shall be PVC containing a PVC back plate and PVC extension shield or a rigid galvanized steel conduit, as indicated, and conforming to UL 6. Provide conductors and terminations as specified in Section 33 71 02.00 10 ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND.

## 2.14 GROUP-OPERATED LOAD INTERRUPTER SWITCHES

### 2.14.1 Manually Operated Type (Switch Handle Operated)

Manually operated (switch handle operated) load interrupter switches shall be relocated from existing poles where indicated on the plans. Switches shall be complete with necessary operating mechanisms, handles, and other items required for manual operation from the ground. Switch operating handles shall be located approximately 3 feet 6 inches above final grade. Each handle shall be provided with a padlock arranged to lock the switch in both the open and the closed position.

## 2.15 ELECTRICAL TAPES

Tapes shall be UL listed for electrical insulation and other purposes in wire and cable splices. Terminations, repairs and miscellaneous purposes,

electrical tapes shall comply with UL 510.

## 2.16 CALKING COMPOUND

Compound for sealing of conduit risers shall be of a puttylike consistency workable with hands at temperatures as low as 35 degrees F, shall not slump at a temperature of 300 degrees F, and shall not harden materially when exposed to air. Compound shall readily calk or adhere to clean surfaces of the materials with which it is designed to be used. Compound shall have no injurious effects upon the workmen or upon the materials.

## 2.17 NAMEPLATES

### 2.17.1 Manufacturer's Nameplate

Each item of equipment shall have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable. Equipment containing liquid-dielectrics shall have the type of dielectric on the nameplate.

### 2.17.2 Field Fabricated Nameplates

ASTM D 709. Provide laminated plastic nameplates for each equipment enclosure, relay, switch, and device; as specified or as indicated on the drawings. Each nameplate inscription shall identify the function and, when applicable, the position. Nameplates shall be melamine plastic, 0.125 inch thick, white with black center core. Surface shall be matte finish. Corners shall be square. Accurately align lettering and engrave into the core. Minimum size of nameplates shall be one by 2.5 inches. Lettering shall be a minimum of 0.25 inch high normal block style.

## PART 3 EXECUTION

### 3.1 INSTALLATION

Provide overhead pole line installation conforming to requirements of IEEE C2 for Grade B construction of overhead lines in medium loading districts and NFPA 70 for overhead services. Provide material required to make connections into existing system and perform excavating, backfilling, and other incidental labor. Consider street, alleys, roads and drives "public." Pole configuration shall be as indicated.

#### 3.1.1 Tree Trimming

Where lines pass through trees, trees shall be trimmed at least 15 feet clear on both sides horizontally and below for medium-voltage lines, and 5 feet clear on both sides horizontally and below for other lines. No branch shall overhang horizontal clearances.

#### 3.1.2 Anchors and Guys

Place anchors in line with strain. The length of the guy lead (distance from base of pole to the top of the anchor rod) shall be as indicated.

##### 3.1.2.1 Setting Anchors

Set anchors in place with anchor rod aligned with, and pointing directly at, guy attachment on the pole with the anchor rod projecting 6 to 9 inches out of ground to prevent burial of rod eye.

#### 3.1.2.2 Backfilling Near Anchors

Backfill anchors with tightly tamped coarse rock 2 feet immediately above anchor and then with tightly tamped earth filling remainder of hole.

#### 3.1.2.3 Screw Anchors

Install screw anchors by torquing with boring machine.

#### 3.1.2.4 Rock Anchors

Install rock anchors minimum depth 12 inches in solid rock.

#### 3.1.2.5 Guy Installation

Provide guys where indicated, with loads and strengths as indicated, and wherever conductor tensions are not balanced, such as at angles, corners and dead-ends. Where single guy will not provide the required strength, two or more guys shall be provided. Provide pole shims where guy tension exceeds 6000 pounds. Guy clamps 6 inches in length with three 5/8 inch bolts, or offset-type guy clamps, or approved guy grips shall be provided at each guy terminal. Securely clamp plastic guy marker to the guy or anchor at the bottom and top of marker. Complete anchor and guy installation, dead end to dead end, and tighten guy before wire stringing and sagging is begun on that line section. Provide strain insulators at a point on guy strand 8 feet minimum from the ground and 6 feet minimum from the surface of pole.

#### 3.1.3 Hardware

Provide hardware with washer against wood and with nuts and lock nuts applied wrench tight. Provide locknuts on threaded hardware connections. Locknuts shall be M-F style and not palnut style.

#### 3.1.4 Grounding

Unless otherwise indicated, grounding shall conform to IEEE C2 and NFPA 70.

##### 3.1.4.1 Grounding Electrode Installation

Grounding electrodes shall be installed as follows:

- a. Driven rod electrodes - Unless otherwise indicated, ground rods shall be located approximately 3 feet out from base of the pole and shall be driven into the earth until the tops of the rods are approximately 1 foot below finished grade. Multiple rods shall be evenly spaced at least 10 feet apart and connected together 2 feet below grade with a minimum No. 6 bare copper conductor.
- b. Ground resistance - The maximum resistance of a driven ground rod shall not exceed 25 ohms under normally dry conditions. Whenever the required ground resistance is not met, provide additional electrodes interconnected with grounding conductors, to achieve



the specified ground resistance. The additional electrodes will be up to three, 10 feet rods spaced a minimum of 10 feet apart. In high ground resistance, UL listed chemically charged ground rods may be used. If the resultant resistance exceeds 25 ohms measured not less than 48 hours after rainfall, notify the Contracting Officer immediately.

#### 3.1.4.2 Grounding Electrode Conductors

On multi-grounded circuits, as defined in IEEE C2, provide a single continuous vertical grounding electrode conductor. Neutrals, surge arresters, and equipment grounding conductors shall be bonded to this conductor. For single-grounded or ungrounded systems, provide a grounding electrode conductor for the surge arrester and equipment grounding conductors and a separate grounding electrode conductor for the secondary neutrals. Grounding electrode conductors shall be stapled to wood poles at intervals not exceeding 2 feet. Grounding electrode conductors shall be sized as indicated. Secondary system neutral conductors shall be connected directly to the transformer neutral bushings, then connected with a neutral bonding jumper between the transformer neutral bushing and the vertical grounding electrode conductor as indicated. Bends greater than 45 degrees in grounding electrode conductor are not permitted.

#### 3.1.4.3 Grounding Electrode Connections

Make above grade grounding connections on pole lines by exothermic weld or by using a compression connector. Make below grade grounding connections by exothermic weld. Make exothermic welds strictly in accordance with manufacturer's written recommendations. Welds which have puffed up or which show convex surfaces indicating improper cleaning, are not acceptable. No mechanical connectors are required at exothermic weldments. Compression connectors shall be type that uses a hydraulic compression tool to provide correct pressure. Provide tools and dies recommended by compression connector manufacturer. An embossing die code or similar method shall provide visible indication that a connector has been fully compressed on ground wire.

#### 3.1.4.4 Grounding and Grounded Connections

- a. Where no primary or common neutral exists, surge arresters and frames of equipment operating at over 750 volts shall be bonded together and connected to a dedicated primary grounding electrode.
- b. Where no primary or common neutral exists, transformer secondary neutral bushing, secondary neutral conductor, and frames of equipment operating at under 750 volts shall be bonded together and connected to a dedicated secondary grounding electrode.
- c. When a primary or common neutral exists, connect all grounding and grounded conductors to a common grounding electrode.

#### 3.1.4.5 Protective Molding

Protect grounding conductors which are run on surface of wood poles by PVC molding extending from ground line throughout communication and transformer spaces.

### 3.1.5 CONDUCTOR INSTALLATION

#### 3.1.5.1 Line Conductors

Unless otherwise indicated, conductors shall be installed in accordance with manufacturer's approved tables of sags and tensions. Conductors shall be handled with care necessary to prevent nicking, kinking, gouging, abrasions, sharp bends, cuts, flattening, or otherwise deforming or weakening conductor or any damage to insulation or impairing its conductivity. Remove damaged sections of conductor and splice conductor. Conductors shall be paid out with the free end of conductors fixed and cable reels portable, except where terrain or obstructions make this method unfeasible. Bend radius for any insulated conductor shall not be less than the applicable NEMA specification recommendation. Conductors shall not be drawn over rough or rocky ground, nor around sharp bends. When installed by machine power, conductors shall be drawn from a mounted reel through stringing sheaves in straight lines clear of obstructions. Initial sag and tension shall be checked by the Contractor, in accordance with the manufacturer's approved sag and tension charts, within an elapsed time after installation as recommended by the manufacturer.

#### 3.1.5.2 Connectors and Splices

Conductor splices, as installed, shall exceed ultimate rated strength of conductor and shall be of type recommended by conductor manufacturer. No splice shall be permitted within 10 feet of a support. Connectors and splices shall be mechanically and electrically secure under tension and shall be of the nonbolted compression type. The tensile strength of any splice shall be not less than the rated breaking strength of the conductor. Splice materials, sleeves, fittings, and connectors shall be noncorrosive and shall not adversely affect conductors. Aluminum-composition conductors shall be wire brushed and an oxide inhibitor applied before making a compression connection. Connectors which are factory-filled with an inhibitor are acceptable. Inhibitors and compression tools shall be of types recommended by the connector manufacturer. Primary line apparatus taps shall be by means of hot line clamps attached to compression type bail clamps (stirrups). Low-voltage connectors for copper conductors shall be of the solderless pressure type. Noninsulated connectors shall be smoothly taped to provide a waterproof insulation equivalent to the original insulation, when installed on insulated conductors. On overhead connections of aluminum and copper, the aluminum shall be installed above the copper.

#### 3.1.5.3 Conductor-To-Insulator Attachments

Conductors shall be attached to insulators by means of clamps, shoes or tie wires, in accordance with the type of insulator. For insulators requiring conductor tie-wire attachments, tie-wire sizes shall be as specified in TABLE I.

TABLE I

#### TIE-WIRE REQUIREMENTS

CONDUCTOR  
Copper (AWG)

6

TIE WIRE  
Soft-Drawn Copper (AWG)

8

TABLE I  
TIE-WIRE REQUIREMENTS

| CONDUCTOR      |                   | TIE WIRE                |
|----------------|-------------------|-------------------------|
| Copper (AWG)   |                   | Soft-Drawn Copper (AWG) |
| 4 and 2        |                   | 6                       |
| 1 through 3/0  |                   | 4                       |
| 4/0 and larger |                   | 2                       |
| ACSR (AWG)     | AAAC OR AAC (AWG) |                         |
| Any size       |                   | 6 or 4                  |

#### 3.1.5.4 Armor Rods

Armor rods shall be provided for ACSR conductors. Armor rods shall be installed at supports, except armor rods will not be required at primary dead-end assemblies if aluminum or aluminum-lined zinc-coated steel clamps are used. Lengths and methods of fastening armor rods shall be in accordance with the manufacturer's recommendations. For span lengths of less than 200 feet, flat aluminum armor rods may be used. Flat armor rods, not less than 0.03 by 0.25 inch shall be used on No. 1 AWG AAC and AAAC and smaller conductors and on No. 5 AWG ACSR and smaller conductors. On larger sizes, flat armor rods shall be not less than 0.05 by 0.30 inches. For span lengths of 200 feet or more, preformed round armor rods shall be used.

#### 3.1.5.5 Ties

Provide ties on pin insulators tight against conductor and insulator and ends turned down flat against conductor so that no wire ends project.

#### 3.1.5.6 Low-Voltage Insulated Cables

Low-voltage cables shall be supported on clevis fittings using spool insulators. Dead-end clevis fittings and suspensions insulators shall be provided where required for adequate strength. Dead-end construction shall provide a strength exceeding the rated breaking strength of the neutral messenger. Clevis attachments shall be provided with not less than 5/8 inch through-bolts. Secondary racks may be used when installed on wood poles and where the span length does not exceed 200 feet. Secondary racks shall be two-, three-, or four-wire, complete with spool insulators. Racks shall meet strength and deflection requirements for heavy-duty steel racks, and shall be rounded and smooth to avoid damage to conductor insulation. Each insulator shall be held in place with a 5/8 inch button-head bolt equipped with a nonferrous cotter pin, or equivalent, at the bottom. Racks for dead-ending four No. 4/0 AWG or four larger conductors shall be attached to poles with three 5/8 inch through-bolts. Other secondary racks shall be attached to poles with at least two 5/8 inch through-bolts. Minimum vertical spacing between conductors shall not be less than 8 inches.

#### 3.1.5.7 Reinstalling Conductors

Existing conductors to be reinstalled or resagged shall be strung to "final" sag table values indicated for the particular conductor type and

size involved.

#### 3.1.5.8 New Conductor Installation

String new conductors to "initial" sag table values recommended by the manufacturer for conductor type and size of conductor and ruling span indicated.

#### 3.1.5.9 Fittings

Dead end fittings, clamp or compression type, shall conform to written recommendations of conductor manufacturer and shall develop full ultimate strength of conductor.

#### 3.1.5.10 Aluminum Connections

Make aluminum connections to copper or other material using only splices, connectors, lugs, or fittings designed for that specific purpose. Keep a copy of manufacturer's instructions for applying these fittings at job site for use of the inspector.

#### 3.1.6 Risers

Secure galvanized steel conduits on poles by two hole galvanized steel pipe straps spaced as indicated and within 3 feet of any outlet or termination. Ground metallic conduits.

### 3.2 CROSSARM MOUNTING

Crossarms shall be bolted to poles with 5/8 inch through-bolts with square washers at each end or as recommended by the crossarm manufacturer. Bolts shall extend not less than 1/8 inch nor more than 2 inches beyond nuts. On single crossarm construction, the bolt head shall be installed on the crossarm side of the pole. Crossarm braces shall be provided on crossarms where required.

#### 3.2.1 Line Arms and Buck Arms

Line arms and buck arms shall be set at right angles to lines for straight runs and for angles 45 degrees and greater; and line arms shall bisect angles of turns of less than 45 degrees. Dead-end assemblies shall be used for turns where shown. Buck arms shall be installed, as shown, at corners and junction poles. Double crossarms shall be provided at ends of joint use or conflict sections, at dead-ends, and at angles and corners to provide adequate vertical and longitudinal strength. Double crossarms shall be provided at each line-crossing structure and where lines not attached to the same pole cross each other.

#### 3.2.2 Equipment Arms

Equipment arms shall be set parallel or at right angles to lines as required to provide climbing space. Equipment arms shall be located below line construction to provide necessary wire and equipment clearances.

### 3.3 FIELD APPLIED PAINTING

Paint electrical equipment as required to match finish of adjacent surfaces

or to meet the indicated or specified safety criteria. Painting shall be as specified in Section 09 90 00 PAINTS AND COATINGS.

#### 3.4 FIELD FABRICATED NAMEPLATE MOUNTING

Provide number, location, and letter designation of nameplates as indicated. Fasten nameplates to the device with a minimum of two sheet-metal screws or two rivets.

#### 3.5 FIELD QUALITY CONTROL

##### 3.5.1 General

Field testing shall be performed in the presence of the Contracting Officer. The Contractor shall notify the Contracting Officer 5 days prior to conducting tests. The Contractor shall furnish materials, labor, and equipment necessary to conduct field tests. The Contractor shall perform tests and inspections recommended by the manufacturer unless specifically waived by the Contracting Officer. The Contractor shall maintain a written record of tests which includes date, test performed, personnel involved, devices tested, serial number and name of test equipment, and test results. Field reports will be signed and dated by the Contractor.

##### 3.5.2 Safety

The Contractor shall provide and use safety devices such as rubber gloves, protective barriers, and danger signs to protect and warn personnel in the test vicinity. The Contractor shall replace any devices or equipment which are damaged due to improper test procedures or handling.

##### 3.5.3 Sag and Tension Test

The Contracting Officer shall be given prior notice of the time schedule for stringing conductors or cables serving overhead medium-voltage circuits and reserves the right to witness the procedures used for ascertaining that initial stringing sags and tensions are in compliance with requirements for the applicable loading district and cable weight.

##### 3.5.4 Low-Voltage Cable Test

For underground secondary or service laterals from overhead lines, the low-voltage cable, complete with splices, shall be tested for insulation resistance after the cables are installed, in their final configuration, ready for connection to the equipment, and prior to energization. The test voltage shall be 500 volts dc, applied for one minute between each conductor and ground and between all possible combinations of conductors in the same trench, duct, or cable, with other conductors in the same trench, duct, or conduit. The minimum value of insulation shall be:

$R \text{ in megohms} = (\text{rated voltage in kV} + 1) \times 1000 / (\text{length of cable in feet})$

Each cable failing this test shall be repaired or replaced. The repaired cable shall then be retested until failures have been eliminated.

##### 3.5.5 Pre-Energization Services

The following services shall be performed on the equipment listed below. These services shall be performed subsequent to testing but prior to the initial energization. The equipment shall be inspected to insure that installation is in compliance with the recommendations of the manufacturer and as shown on the detail drawings. Terminations of conductors at major equipment shall be inspected to ensure the adequacy of connections. Bare and insulated conductors between such terminations shall be inspected to detect possible damage during installation. If factory tests were not performed on completed assemblies, tests shall be performed after the installation of completed assemblies. Components shall be inspected for damage caused during installation or shipment and to ensure that packaging materials have been removed. Components capable of being both manually and electrically operated shall be operated manually prior to the first electrical operation. Components capable of being calibrated, adjusted, and tested shall be calibrated, adjusted, and tested in accordance with the instructions of the equipment manufacturer. Items for which such services shall be provided, but are not limited to, are the following:

Switches.

### 3.5.6 Performance of Acceptance Checks and Tests

Perform in accordance with the manufacturer's recommendations and include the following visual and mechanical inspections and electrical tests, performed in accordance with NETA ATS.

#### 3.5.6.1 Grounding System

##### a. Visual and mechanical inspection

(1) Inspect ground system for compliance with contract plans and specifications.

##### b. Electrical tests

(1) Perform ground-impedance measurements utilizing the fall-of-potential method. On systems consisting of interconnected ground rods, perform tests after interconnections are complete. On systems consisting of a single ground rod perform tests before any wire is connected. Take measurements in normally dry weather, not less than 48 hours after rainfall. Use a portable ground testing megger in accordance with manufacturer's instructions to test each ground or group of grounds. The instrument shall be equipped with a meter reading directly in ohms or fractions thereof to indicate the ground value of the ground rod or grounding systems under test.

### 3.5.7 Devices Subject to Manual Operation

Each device subject to manual operation shall be operated at least three times, demonstrating satisfactory operation each time.

### 3.5.8 Follow-Up Verification

Upon completion of acceptance checks and tests, the Contractor shall show by demonstration in service that circuits and devices are in good operating

condition and properly performing the intended function. As an exception to requirements stated elsewhere in the contract, the Contracting Officer shall be given 5 working days advance notice of the dates and times of checking and testing.

-- End of Section --



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## SECTION 33 82 00

## TELECOMMUNICATIONS OUTSIDE PLANT (OSP)

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

## ASTM INTERNATIONAL (ASTM)

|             |                                                                                                                |
|-------------|----------------------------------------------------------------------------------------------------------------|
| ASTM B 1    | Hard-Drawn Copper Wire                                                                                         |
| ASTM B 8    | Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft                                          |
| ASTM D 1557 | Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/cu. ft. (2,700 kN-m/cu.m.)) |
| ASTM D 709  | Laminated Thermosetting Materials                                                                              |

## ELECTRONIC INDUSTRIES ALLIANCE (EIA)

|                       |                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| EIA EIA/TIA-455-B     | Standard Test Procedure for Fiber Optic Fibers, Cables, Transducers, Sensors, Connecting and Terminating Devices, and other Fiber Optic Components |
| EIA TIA/EIA-455-107A  | Component Reflectance or Link/System Return Loss using a Loss Test Set                                                                             |
| EIA TIA/EIA-455-204   | FOTP-204 Measurement of Bandwidth on Multimode Fiber                                                                                               |
| EIA TIA/EIA-455-46A   | FOTP-46 Spectral Attenuation Measurement for Long-Length, Graded-Index Optical Fibers                                                              |
| EIA TIA/EIA-455-59A   | FOTP-59 Measurement of Fiber Point Discontinuities Using an OTDR                                                                                   |
| EIA TIA/EIA-455-61A   | FOTP-61 Measurement of Fiber or Cable Attenuation Using an OTDR                                                                                    |
| EIA TIA/EIA-472D000-A | Fiber Optic Communications Cable for Outside Plant Use                                                                                             |
| EIA TIA/EIA-492AAAA-A | 62.5-um Core Diameter/125-um Cladding Diameter Class 1a Graded-Index Multimode Optical Fibers (ANSI/TIA/EIA-492AAAA-A)                             |

|                     |                                                                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| EIA TIA/EIA-492AAAB | 50-Um Core Diameter/125-Um Cladding<br>Diameter Class IA Graded-Index Multimode<br>Optical Fibers                                          |
| EIA TIA/EIA-492CAAA | Class IVA Dispersion-Unshifted Single-Mode<br>Optical Fibers                                                                               |
| EIA TIA/EIA-492E000 | Class IVd Nonzero-Dispersion Single-Mode<br>Optical Fibers for the 1550 nm Window<br>(ANSI/TIA/EIA-492E000)                                |
| EIA TIA/EIA-526-14A | OFSTP-14A Optical Power Loss Measurements<br>of Installed Multimode Fiber Cable Plant<br>(ANSI/TIA/EIA-526-14A)                            |
| EIA TIA/EIA-526-7   | OFSTP-7 Measurement of Optical Power Loss<br>of Installed Single-Mode Fiber Cable Plant<br>(ANSI/TIA/EIA-526-7)                            |
| EIA TIA/EIA-568-B.1 | Commercial Building Telecommunications<br>Cabling Standard - Part 1: General<br>Requirements (ANSI/TIA/EIA-568-B.1)                        |
| EIA TIA/EIA-568-B.2 | Commercial Building Telecommunications<br>Cabling Standard - Part 2: Balanced<br>Twisted Pair Cabling Components<br>(ANSI/TIA/EIA-568-B.2) |
| EIA TIA/EIA-568-B.3 | Optical Fiber Cabling Components Standard<br>(ANSI/TIA/EIA-568-B.3)                                                                        |
| EIA TIA/EIA-569-A   | Commercial Building Standards for<br>Telecommunications Pathways and Spaces<br>(ANSI/TIA/EIA-569-A)                                        |
| EIA TIA/EIA-590-A   | Standard for Physical Location and<br>Protection of Below Ground Fiber Optic<br>Cable Plant                                                |
| EIA TIA/EIA-598-B   | Optical Fiber Cable Color Coding                                                                                                           |
| EIA TIA/EIA-606-A   | Administration Standard for the<br>Telecommunications Infrastructure<br>(ANSI/TIA/EIA-606)                                                 |
| EIA TIA/EIA-758     | Customer-Owned Outside Plant<br>Telecommunications Cabling Standard<br>(ANSI/TIA/EIA-758)                                                  |
| TIA J-STD-607-A     | Commercial Building Grounding (Earthing)<br>and Bonding Requirements for<br>Telecommunications                                             |

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C2

National Electrical Safety Code

IEEE Std 100

The Authoritative Dictionary of IEEE  
Standards Terms

INSULATED CABLE ENGINEERS ASSOCIATION (ICEA)

ICEA S-87-640

Fiber Optic Outside Plant Communications  
Cable

ICEA S-98-688

Broadband Twisted Pair, Telecommunications  
Cable Aircore, Polyolefin Insulated Copper  
Conductors

ICEA S-99-689

Broadband Twisted Pair Telecommunications  
Cable Filled, Polyolefin Insulated Copper  
Conductors

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA C62.61

Gas Tube Surge Arresters on Wire Line  
Telephone Circuits

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70

National Electrical Code

THE SOCIETY FOR PROTECTIVE COATINGS (SSPC)

SSPC SP 6

Commercial Blast Cleaning

U.S. DEPARTMENT OF AGRICULTURE (USDA)

RUS 1755

Telecommunications Standards and  
Specifications for Materials, Equipment  
and Construction

RUS Bul 1751F-630

Underground Plant Design

RUS Bul 1751F-640

Design of Buried Plant, Physical  
Considerations

RUS Bul 1751F-643

Design of Aerial Plant

RUS Bul 1751F-815

Electrical Protection of Outside Plant

RUS Bul 1753F-201

(1997) Acceptance Tests of  
Telecommunications Plant (PC-4)

RUS Bul 1753F-401

Splicing Copper and Fiber Optic Cables  
(PC-2)

RUS Bul 345-50

Trunk Carrier Systems (PE-60)

RUS Bul 345-65

Shield Bonding Connectors (PE-65)

RUS Bul 345-72

Filled Splice Closures (PE-74)

RUS Bul 345-83

Gas Tube Surge Arrestors (PE-80)

UNDERWRITERS LABORATORIES (UL)

UL 497

Protectors for Paired Conductor  
Communication Circuits

UL 510

Polyvinyl Chloride, Polyethylene, and  
Rubber Insulating Tape

UL 83

Thermoplastic-Insulated Wires and Cables

1.2 RELATED REQUIREMENTS

Section 33 71 01, OVERHEAD TRANSMISSION AND DISTRIBUTION apply to this section with additions and modifications specified herein.

1.3 DEFINITIONS

Unless otherwise specified or indicated, electrical and electronics terms used in this specification shall be as defined in EIA TIA/EIA-568-B.1, EIA TIA/EIA-568-B.2, EIA TIA/EIA-568-B.3, EIA TIA/EIA-569-A, EIA TIA/EIA-606-A, and IEEE Std 100 and herein.

1.3.1 Campus Distributor (CD)

A distributor from which the campus backbone cabling emanates.  
(International expression for main cross-connect - (MC).)

1.3.2 Entrance Facility (EF) (Telecommunications)

An entrance to the building for both private and public network service cables (including antennae) including the entrance point at the building wall and continuing to the entrance room or space.

1.3.3 Entrance Room (ER) (Telecommunications)

A centralized space for telecommunications equipment that serves the occupants of a building. Equipment housed therein is considered distinct from a telecommunications room because of the nature of its complexity.

1.3.4 Building Distributor (BD)

A distributor in which the building backbone cables terminate and at which connections to the campus backbone cables may be made. (International expression for intermediate cross-connect - (IC).)

1.3.5 Pathway

A physical infrastructure utilized for the placement and routing of telecommunications cable.

1.4 SYSTEM DESCRIPTION

A road widening project on Martin Road from Rideout Road to Gate 7 requires the relocation of overhead electrical services, including communications to the south side of Martin Road. The telecommunications outside plant consists

of cable, conduit, manholes, handholes, etc. required to provide signal paths along Martin Road from an existing manhole at Gemini to a termination enclosure at Anderson Road. In addition, splices and taps will be provided as indicated for extending services to existing buildings along the route. The work consists of providing, testing and making operational cabling, interconnecting hardware necessary to form a complete outside plant telecommunications system for continuous use.

#### 1.5 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted:

##### Shop Drawings

Telecommunications Outside Plant G,

Product Data

Wire and cable G,

Cable splices, and connectors G,

Closures G,

Spare Parts G,

Submittals shall include the manufacturer's name, trade name, place of manufacture, and catalog model or number. Submittals shall also include applicable federal, military, industry, and technical society publication references.

##### Test Reports

Pre-installation tests G,

Acceptance tests G,

Outside Plant Test Plan G,

##### Certificates

Telecommunications Contractor Qualifications G,

Key Personnel Qualifications G,

Minimum Manufacturer's Qualifications G,

##### Manufacturer's Instructions

Cable tensions G,

Fiber Optic Splices G,

Submit instructions prior to installation.

Manufacturer's Field Reports

Factory Reel Test Data G,

Operation and Maintenance Data

Closeout Submittals

Record Documentation G,

## 1.6 QUALITY ASSURANCE

### 1.6.1 Shop Drawings

Include wiring diagrams and installation details of equipment indicating proposed location, layout and arrangement, control panels, accessories, piping, ductwork, and other items that must be shown to ensure a coordinated installation. Wiring diagrams shall identify circuit terminals and indicate the internal wiring for each item of equipment and the interconnection between each item of equipment. Drawings shall indicate adequate clearance for operation, maintenance, and replacement of operating equipment devices. Submittals shall include the nameplate data, size, and capacity. Submittals shall also include applicable federal, military, industry, and technical society publication references.

#### 1.6.1.1 Telecommunications Outside Plant Shop Drawings

Provide Outside Plant Design in accordance with EIA TIA/EIA-758, RUS Bul 1751F-630 for aerial system design, and RUS Bul 1751F-643 for underground system design. Provide TO shop drawings that show the physical and logical connections from the perspective of an entire campus, such as actual building locations, exterior pathways and campus backbone cabling on plan view drawings, and related connections on the logical system drawings in accordance with EIA TIA/EIA-606-A. Drawings shall include wiring and schematic diagrams for fiber optic and copper cabling and splices, copper conductor gauge and pair count, fiber pair count and type, pathway duct and innerduct arrangement, associated construction materials, and any details required to demonstrate that cable system has been coordinated. The telecommunications outside plant (OSP) shop drawings shall be included in the operation and maintenance manuals.

#### 1.6.1.2 Telecommunications Entrance Facility Drawings

### 1.6.2 Telecommunications Qualifications

Work under this section shall be performed by and the equipment shall be provided by the approved telecommunications contractor and key personnel. Qualifications shall be provided for: the telecommunications system contractor, the telecommunications system installer, the supervisor (if different from the installer), and the cable splicing and terminating personnel. A minimum of 30 days prior to installation, submit documentation of the experience of the telecommunications contractor and of the key personnel.

#### 1.6.2.1 Telecommunications Contractor Qualifications



The telecommunications contractor shall be a firm which is regularly and professionally engaged in the business of the applications, installation, and testing of the specified telecommunications systems and equipment. The telecommunications contractor shall demonstrate experience in providing successful telecommunications systems that include outside plant and broadband cabling within the past 3 years. Submit documentation for a minimum of three and a maximum of five successful telecommunication system installations for the telecommunications contractor. Each of the key personnel shall demonstrate experience in providing successful telecommunications systems in accordance with EIA TIA/EIA-758 within the past 3 years.

#### 1.6.2.2 Key Personnel Qualifications

Provide key personnel who are regularly and professionally engaged in the business of the application, installation and testing of the specified telecommunications systems and equipment. There may be one key person or more key persons proposed for this solicitation depending upon how many of the key roles each has successfully provided. Each of the key personnel shall demonstrate experience in providing successful telecommunications systems within the past 3 years.

Cable splicing and terminating personnel assigned to the installation of this system or any of its components shall have training in the proper techniques and have a minimum of 3 years experience in splicing and terminating the specified cables. Modular splices shall be performed by factory certified personnel or under direct supervision of factory trained personnel for products used.

Supervisors and installers assigned to the installation of this system or any of its components shall have factory or factory approved certification from each equipment manufacturer indicating that they are qualified to install and test the provided products.

Submit documentation for a minimum of three and a maximum of five successful telecommunication system installations for each of the key personnel. Documentation for each key person shall include at least two successful system installations provided that are equivalent in system size and in construction complexity to the telecommunications system proposed for this solicitation. Include specific experience in installing and testing telecommunications outside plant systems, including broadband cabling, and provide the names and locations of at least two project installations successfully completed using optical fiber and copper telecommunications cabling systems. All of the existing telecommunications system installations offered by the key persons as successful experience shall have been in successful full-time service for at least 18 months prior to the issuance date for this solicitation. Provide the name and role of the key person, the title, location, and completed installation date of the referenced project, the referenced project owner point of contact information including name, organization, title, and telephone number, and generally, the referenced project description including system size and construction complexity.

Indicate that all key persons are currently employed by the telecommunications contractor, or have a commitment to the telecommunications contractor to work on this project. All key persons shall be employed by the telecommunications contractor at the date of issuance of this solicitation, or if not, have a commitment to the

telecommunications contractor to work on this project by the date that the bid was due to the Contracting Officer.

Note that only the key personnel approved by the Contracting Officer in the successful proposal shall do work on this solicitation's telecommunications system. Key personnel shall function in the same roles in this contract, as they functioned in the offered successful experience. Any substitutions for the telecommunications contractor's key personnel requires approval from The Contracting Officer.

#### 1.6.2.3 Minimum Manufacturer's Qualifications

Cabling, equipment and hardware manufacturers shall have a minimum of 3 years experience in the manufacturing, assembly, and factory testing of components which comply with, EIA TIA/EIA-568-B.1, EIA TIA/EIA-568-B.2 and EIA TIA/EIA-568-B.3. In addition, cabling manufacturers shall have a minimum of 3 years experience in the manufacturing and factory testing of cabling which comply with ICEA S-87-640, ICEA S-98-688, and ICEA S-99-689.

#### 1.6.3 Outside Plant Test Plan

Prepare and provide a complete and detailed test plan for field tests of the outside plant including a complete list of test equipment for the copper conductor and optical fiber cables, components, and accessories for approval by the Contracting Officer. Include a cut-over plan with procedures and schedules for relocation of facility station numbers without interrupting service to any active location. Submit the plan at least 30 days prior to tests for Contracting Officer approval. Provide outside plant testing and performance measurement criteria in accordance with EIA TIA/EIA-568-B.1 and RUS Bul 1753F-201. Include procedures for certification, validation, and testing that includes fiber optic link performance criteria.

#### 1.6.4 Standard Products

Provide materials and equipment that are standard products of manufacturers regularly engaged in the production of such products which are of equal material, design and workmanship and shall be the manufacturer's latest standard design that has been in satisfactory commercial or industrial use for at least 1 year prior to bid opening. The 1-year period shall include applications of equipment and materials under similar circumstances and of similar size. The product shall have been on sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the 1-year period. Products supplied shall be specifically designed and manufactured for use with outside plant telecommunications systems. Where two or more items of the same class of equipment are required, these items shall be products of a single manufacturer; however, the component parts of the item need not be the products of the same manufacturer unless stated in this section.

##### 1.6.4.1 Alternative Qualifications

Products having less than a 1-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 3000 hours, exclusive of the manufacturers' factory or laboratory tests, is provided.

##### 1.6.4.2 Material and Equipment Manufacturing Date

Products manufactured more than 3 years prior to date of delivery to site shall not be used, unless specified otherwise.

#### 1.6.5 Regulatory Requirements

In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, "shall" had been substituted for "should" wherever it appears. Interpret references in these publications to the "authority having jurisdiction," or words of similar meaning, to mean the Contracting Officer. Equipment, materials, installation, and workmanship shall be in accordance with the mandatory and advisory provisions of NFPA 70 unless more stringent requirements are specified or indicated.

##### 1.6.5.1 Independent Testing Organization Certificate

In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Contracting Officer. The certificate shall state that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

Ship cable on reels in 1000 feet length with a minimum overage of 10 percent. Radius of the reel drum shall not be smaller than the minimum bend radius of the cable. Wind cable on the reel so that unwinding can be done without kinking the cable. Two meters of cable at both ends of the cable shall be accessible for testing. Attach permanent label on each reel showing length, cable identification number, cable size, cable type, and date of manufacture. Provide water resistant label and the indelible writing on the labels. Apply end seals to each end of the cables to prevent moisture from entering the cable. Reels with cable shall be suitable for outside storage conditions when temperature ranges from minus 40 degrees C to plus 65 degrees C, with relative humidity from 0 to 100 percent. Equipment, other than cable, delivered and placed in storage shall be stored with protection from weather, humidity and temperature variation, dirt and dust, or other contaminants in accordance with manufacturer's requirements.

#### 1.8 MAINTENANCE

##### 1.8.1 Record Documentation

Provide the activity responsible for telecommunications system maintenance and administration a single complete and accurate set of record documentation for the entire telecommunications system with respect to this project.

Provide the following T5 drawing documentation as a minimum:

- a. Cables - A record of installed cable shall be provided in accordance with EIA TIA/EIA-606-A. The cable records shall include only the required data fields in accordance with EIA TIA/EIA-606-A. Include manufacture date of cable with submittal.

- b. Termination Hardware - Provide a record of installed patch panels, cross-connect points, campus distributor and terminating block arrangements and type in accordance with EIA TIA/EIA-606-A. Documentation shall include the required data fields in accordance with EIA TIA/EIA-606-A.

## 1.9 WARRANTY

The equipment items shall be supported by service organizations which are reasonably convenient to the equipment installation in order to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.

## PART 2 PRODUCTS

### 2.1 MATERIALS AND EQUIPMENT

Products supplied shall be specifically designed and manufactured for use with outside plant telecommunications systems.

### 2.3 CLOSURES

#### 2.3.1 Copper Conductor Closures

##### 2.3.1.2 Underground Cable Closures

- a. Aboveground: Provide aboveground closures constructed of not less than 14 gauge steel and acceptable for stake mounting in accordance with RUS 1755.910. Closures shall be sized and contain a marker as indicated. Covers shall be secured to prevent unauthorized entry.
- b. In vault or manhole: Provide underground closure suitable to house a straight, butt, and branch splice in a protective housing into which can be poured an encapsulating compound. Closure shall be of suitable thermoplastic, thermoset, or stainless steel material supplying structural strength necessary to pass the mechanical and electrical requirements in a vault or manhole environment. Encapsulating compound shall be reenterable and shall not alter the chemical stability of the closure. Provide filled splice cases in accordance with RUS Bul 345-72.

#### 2.3.2 Fiber Optic Closures

##### 2.3.2.1 In Vault or Manhole

Provide underground closure suitable to house splice organizer in a protective housing into which can be poured an encapsulating compound. Closure shall be of thermoplastic, thermoset, or stainless steel material supplying structural strength necessary to pass the mechanical and electrical requirements in a vault or manhole environment. Encapsulating compound shall be reenterable and shall not alter the chemical stability of the closure.

## 2.4 CABLE SPLICES, AND CONNECTORS

### 2.4.1 Copper Cable Splices

Provide multipair, in-line splices of a moisture resistant, two-wire insulation displacement connector held rigidly in place to assure maximum continuity in accordance with RUS Bul 1753F-401. Cables greater than 25 pairs shall be spliced using multipair splicing connectors, which accommodate 25 pairs of conductors at a time. Provide correct connector size to accommodate the cable gauge of the supplied cable.

### 2.4.2 Copper Cable Splice Connector

Provide splice connectors with a polycarbonate body and cap and a tin-plated brass contact element. Connector shall accommodate 22 to 26 AWG solid wire with a maximum insulation diameter of 0.065 inch. Fill connector with sealant grease to make a moisture resistant connection, in accordance with RUS Bul 1753F-401.

### 2.4.3 Fiber Optic Cable Splices

Provide fiber optic cable splices and splicing materials for fusion methods at locations shown on the construction drawings. The splice insertion loss shall be 0.3 dB maximum when measured in accordance with EIA TIA/EIA-455-59A using an Optical Time Domain Reflectometer (OTDR). Splices shall be designed for a return loss of 40.0 db max for single mode fiber when tested in accordance with EIA TIA/EIA-455-107A. Physically protect each fiber optic splice by a splice kit specially designed for the splice.

### 2.4.4 Fiber Optic Splice Organizer

Provide splice organizer suitable for housing fiber optic splices in a neat and orderly fashion. Splice organizer shall allow for a minimum of 3 feet of fiber for each fiber within the cable to be neatly stored without kinks or twists. Splice organizer shall accommodate individual strain relief for each splice and allow for future maintenance or modification, without damage to the cable or splices. Provide splice organizer hardware, such as splice trays, protective glass shelves, and shield bond connectors in a splice organizer kit.

### 2.4.5 Shield Connectors

Provide connectors with a stable, low-impedance electrical connection between the cable shield and the bonding conductor in accordance with RUS Bul 345-65.

## 2.5 PLASTIC INSULATING TAPE

UL 510.

## 2.6 WIRE AND CABLE

### 2.6.1 Copper Conductor Cable

Solid copper conductors, covered with an extruded solid insulating compound. Insulated conductors shall be twisted into pairs which are then stranded or oscillated to form a cylindrical core. For special high frequency applications, the cable core shall be separated into

compartments. Cable shall be completed by the application of a suitable core wrapping material, a corrugated copper or plastic coated aluminum shield, and an overall extruded jacket. Telecommunications contractor shall verify distances between splice points prior to ordering cable in specific cut lengths. Gauge of conductor shall determine the range of numbers of pairs specified; 19 gauge (6 to 400 pairs), 22 gauge (6 to 1200 pairs), 24 gauge (6 to 2100 pairs), and 26 gauge (6 to 3000 pairs). Copper conductor shall conform to the following:

#### 2.6.1.1 Underground

Provide filled cable meeting the requirements of ICEA S-99-689 and RUS 1755.390.

#### 2.6.1.3 Screen

Provide screen-compartmental core cable filled cable meeting the requirements of ICEA S-99-689 and RUS 1755.390.

#### 2.6.2 Fiber Optic Cable

Provide single-mode, 8/125-um, 0.10 aperture 1310 nm fiber optic cable in accordance with EIA TIA/EIA-492CAAA . Provide optical fibers as indicated. Fiber optic cable shall be specifically designed for outside use with loose buffer construction. Provide fiber optic color code in accordance with EIA TIA/EIA-598-B

##### 2.6.2.1 Strength Members

Provide central, non-metallic strength members with sufficient tensile strength for installation and residual rated loads to meet the applicable performance requirements in accordance with ICEA S-87-640. The strength member is included to serve as a cable core foundation to reduce strain on the fibers, and shall not serve as a pulling strength member.

##### 2.6.2.2 Shielding or Other Metallic Covering

Provide bare aluminum or coated aluminum, single tape covering or shield in accordance with ICEA S-87-640.

##### 2.6.2.3 Performance Requirements

Provide fiber optic cable with optical and mechanical performance requirements in accordance with ICEA S-87-640.

#### 2.6.3 Grounding and Bonding Conductors

Provide grounding and bonding conductors in accordance with RUS 1755.200, TIA J-STD-607-A, IEEE C2, and NFPA 70. Solid bare copper wire meeting the requirements of ASTM B 1 for sizes No. 8 AWG and smaller and stranded bare copper wire meeting the requirements of ASTM B 8, for sizes No. 6 AWG and larger. Insulated conductors shall have 600-volt, Type TW insulation meeting the requirements of UL 83.

#### 2.7 CABLE TAGS IN MANHOLES, HANDHOLES, AND VAULTS

Provide tags for each telecommunications cable or wire located in manholes,



handholes, and vaults. Cable tags shall be stainless steel or polyethylene and labeled in accordance with EIA TIA/EIA-606-A. Handwritten labeling is unacceptable.

#### 2.7.1 Stainless Steel

Provide stainless steel, cable tags 1 5/8 inches in diameter 1/16 inch thick minimum, and circular in shape. Tags shall be die stamped with numbers, letters, and symbols not less than 0.25 inch high and approximately 0.015 inch deep in normal block style.

#### 2.7.2 Polyethylene Cable Tags

Provide tags of polyethylene that have an average tensile strength of 3250 pounds per square inch; and that are 0.08 inch thick (minimum), non-corrosive non-conductive; resistive to acids, alkalis, organic solvents, and salt water; and distortion resistant to 170 degrees F. Provide 0.05 inch (minimum) thick black polyethylene tag holder. Provide a one-piece nylon, self-locking tie at each end of the cable tag. Ties shall have a minimum loop tensile strength of 175 pounds. The cable tags shall have black block letters, numbers, and symbols one inch high on a yellow background. Letters, numbers, and symbols shall not fall off or change positions regardless of the cable tags' orientation.

#### 2.8 BURIED WARNING AND IDENTIFICATION TAPE

Provide fiber optic media marking and protection in accordance with EIA TIA/EIA-590-A. Provide color, type and depth of tape as specified in paragraph BURIED WARNING AND IDENTIFICATION TAPE in Section 31 00 00, EARTHWORK.

#### 2.9 GROUNDING BRAID

Provide grounding braid that provides low electrical impedance connections for dependable shield bonding in accordance with RUS 1755.200. Braid shall be made from flat tin-plated copper.

#### 2.10 MANUFACTURER'S NAMEPLATE

Each item of equipment shall have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable.

#### 2.11 FIELD FABRICATED NAMEPLATES

Provide laminated plastic nameplates in accordance with ASTM D 709 for each patch panel, protector assembly, rack, cabinet and other equipment or as indicated on the drawings. Each nameplate inscription shall identify the function and, when applicable, the position. Nameplates shall be melamine plastic, 0.125 inch thick, white with black center core. Surface shall be matte finish. Corners shall be square. Accurately align lettering and engrave into the core. Minimum size of nameplates shall be one by 2.5 inches. Lettering shall be a minimum of 0.25 inch high normal block style.

#### 2.16 TESTS, INSPECTIONS, AND VERIFICATIONS



#### 2.16.1 Factory Reel Test Data

Test 100 percent OTDR test of FO media at the factory in accordance with EIA TIA/EIA-568-B.1 and EIA TIA/EIA-568-B.3. Use EIA TIA/EIA-526-7 for single mode fiber and EIA TIA/EIA-526-14A Method B for multi mode fiber measurements. Calibrate OTDR to show anomalies of 0.2 dB minimum. Enhanced performance filled OSP copper cables, referred to as Broadband Outside Plant (BBOSP), shall meet the requirements of ICEA S-99-689. Enhanced performance air core OSP copper cables shall meet the requirements of ICEA S-98-688. Submit test reports, including manufacture date for each cable reel and receive approval before delivery of cable to the project site.

### PART 3 EXECUTION

#### 3.1 INSTALLATION

Install all system components and appurtenances in accordance with manufacturer's instructions IEEE C2, NFPA 70, and as indicated. Provide all necessary interconnections, services, and adjustments required for a complete and operable telecommunications system.

##### 3.1.1 Contractor Damage

Promptly repair indicated utility lines or systems damaged during site preparation and construction. Damages to lines or systems not indicated, which are caused by Contractor operations, shall be treated as "Changes" under the terms of the Contract Clauses. When Contractor is advised in writing of the location of a nonindicated line or system, such notice shall provide that portion of the line or system with "indicated" status in determining liability for damages. In every event, immediately notify the Contracting Officer of damage.

##### 3.1.2 Cable Inspection and Repair

Handle cable and wire provided in the construction of this project with care. Inspect cable reels for cuts, nicks or other damage. Damaged cable shall be replaced or repaired to the satisfaction of the Contracting Officer. Reel wraps shall remain intact on the reel until the cable is ready for placement.

##### 3.1.3 Direct Burial System

Installation shall be in accordance with RUS Bul 1751F-640. Under railroad tracks, paved areas, and roadways install cable in conduit encased in concrete. Slope ducts to drain. Excavate trenches by hand or mechanical trenching equipment. Provide a minimum cable cover of 24 inches below finished grade. Trenches shall be not less than 6 inches wide and in straight lines between cable markers. Do not use cable plows. Bends in trenches shall have a radius of not less than 36 inches. Where two or more cables are laid parallel in the same trench, space laterally at least 3 inches apart. When rock is encountered, remove it to a depth of at least 3 inches below the cable and fill the space with sand or clean earth free from particles larger than 1/4 inch. Do not unreel and pull cables into the trench from one end. Cable may be unreeled on grade and lifted into position. Provide color, type and depth of warning tape as indicated.

3.1.3.1 Cable Placement

- a. Separate cables crossing other cables or metal piping from the other cables or pipe by not less than 3 inches of well tamped earth. Do not install circuits for communications under or above traffic signal loops.
- b. Cables shall be in one piece without splices between connections except where the distance exceeds the lengths in which the cable is furnished.
- c. Avoid bends in cables of small radii and twists that might cause damage. Do not bend cable and wire in a radius less than 10 times the outside diameter of the cable or wire.
- d. Leave a horizontal slack of approximately 3 feet in the ground on each end of cable runs, on each side of connection boxes, and at points where connections are brought aboveground. Where cable is brought aboveground, leave additional slack to make necessary connections.

3.1.3.2 Identification Markers

Provide a marker at each change of direction of the cable, over the ends of ducts or conduits which are installed under paved areas and roadways and over each splice. Identification markers shall be of concrete, approximately 20 inches square by 6 inches thick.

3.1.3.3 Backfill for Rocky Soil

When placing cable in a trench in rocky soil, the cable shall be cushioned by a fill of sand or selected soil at least 2 inches thick on the floor of the trench before placing the cable or wire. The backfill for at least 4 inches above the wire or cable shall be free from stones, rocks, or other hard or sharp materials which might damage the cable or wire. If the buried cable is placed less than 24 inches in depth, a protective cover of concrete shall be used.

3.1.4 Cable Protection

Provide direct burial cable protection in accordance with NFPA 70. Galvanized conduits which penetrate concrete (slabs, pavement, and walls) shall be PVC coated and shall extend from the first coupling or fitting outside either side of the concrete minimum of 6 inches per 12 inches burial depth beyond the edge of the surface where cable protection is required; all conduits shall be sealed on each end. Where additional protection is required, cable may be placed in galvanized iron pipe (GIP) sized on a maximum fill of 40% of cross-sectional area, or in concrete encased 4 inches PVC pipe. Conduit may be installed by jacking or trenching. Trenches shall be backfilled with earth and mechanically tamped at 6 inches lift so that the earth is restored to the same density, grade and vegetation as adjacent undisturbed material.

3.1.4.1 Cable End Caps

Cable ends shall be sealed at all times with coated heat shrinkable end caps. Cables ends shall be sealed when the cable is delivered to the job

site, while the cable is stored and during installation of the cable. The caps shall remain in place until the cable is spliced or terminated. Sealing compounds and tape are not acceptable substitutes for heat shrinkable end caps. Cable which is not sealed in the specified manner at all times will be rejected.

### 3.1.5 Underground Duct

Provide underground duct and connections to existing manholes, handholes, and existing ducts.

### 3.1.6 Cable Pulling

Test duct lines with a mandrel and swab out to remove foreign material before the pulling of cables. Avoid damage to cables in setting up pulling apparatus or in placing tools or hardware. Do not step on cables when entering or leaving the manhole. Do not place cables in ducts other than those shown without prior written approval of the Contracting Officer. Roll cable reels in the direction indicated by the arrows painted on the reel flanges. Set up cable reels on the same side of the manhole as the conduit section in which the cable is to be placed. Level the reel and bring into proper alignment with the conduit section so that the cable pays off from the top of the reel in a long smooth bend into the duct without twisting. Under no circumstances shall the cable be paid off from the bottom of a reel. Check the equipment set up prior to beginning the cable pulling to avoid an interruption once pulling has started. Use a cable feeder guide of suitable dimensions between cable reel and face of duct to protect cable and guide cable into the duct as it is paid off the reel. As cable is paid off the reel, lubricate and inspect cable for sheath defects. When defects are noticed, stop pulling operations and notify the Contracting Officer to determine required corrective action. Cable pulling shall also be stopped when reel binds or does not pay off freely. Rectify cause of binding before resuming pulling operations. Provide cable lubricants recommended by the cable manufacturer. Avoid bends in cables of small radii and twists that might cause damage. Do not bend cable and wire in a radius less than 10 times the outside diameter of the cable or wire.

#### 3.1.6.1 Cable Tensions

Obtain from the cable manufacturer and provide to the Contracting Officer, the maximum allowable pulling tension. This tension shall not be exceeded.

#### 3.1.6.2 Pulling Eyes

Equip cables 1.25 inches in diameter and larger with cable manufacturer's factory installed pulling-in eyes. Provide cables with diameter smaller than 1.25 inches with heat shrinkable type end caps or seals on cable ends when using cable pulling grips. Rings to prevent grip from slipping shall not be beaten into the cable sheath. Use a swivel of 3/4 inch links between pulling-in eyes or grips and pulling strand.

#### 3.1.6.3 Installation of Cables in Manholes, Handholes, and Vaults

Do not install cables utilizing the shortest route, but route along those walls providing the longest route and the maximum spare cable lengths. Form cables to closely parallel walls, not to interfere with duct entrances, and support cables on brackets and cable insulators at a maximum of 4 feet. In existing manholes, handholes, and vaults where new ducts are to be

terminated, or where new cables are to be installed, modify the existing installation of cables, cable supports, and grounding as required with cables arranged and supported as specified for new cables. Identify each cable with corrosion-resistant embossed metal tags.

### 3.1.7 Cable Splicing

#### 3.1.7.1 Copper Conductor Splices

Perform splicing in accordance with requirements of RUS Bul 1753F-401 except that direct buried splices and twisted and soldered splices are not allowed. Exception does not apply for pairs assigned for carrier application.

#### 3.1.7.2 Fiber Optic Splices

Fiber optic splicing shall be in accordance with manufacturer's recommendation and shall exhibit an insertion loss not greater than 0.2 dB for fusion splices or not greater than 0.4 db for mechanical splices.

### 3.1.8 Surge Protection

All cables and conductors, except fiber optic cable, which serve as communication lines through off-premise lines, shall have surge protection installed at each end which meet the requirements of RUS Bul 1751F-815.

### 3.1.9 Grounding

Provide grounding and bonding in accordance with RUS 1755.200, TIA J-STD-607-A, IEEE C2, and NFPA 70. Ground exposed noncurrent carrying metallic parts of telephone equipment, cable sheaths, cable splices, and terminals.

### 3.1.10 Cut-Over

All necessary transfers and cut-overs, shall be accomplished by the telecommunications contractor.

## 3.2 LABELING

### 3.2.1 Labels

Provide labeling for new cabling and termination hardware located within the facility in accordance with EIA TIA/EIA-606-A. Handwritten labeling is unacceptable. Stenciled lettering for cable and termination hardware shall be provided using laser printer.

### 3.2.2 Cable Tag Installation

Install cable tags for each telecommunications cable or wire located in manholes, handholes, and vaults including each splice. Tag only new wire and cable provided by this contract. The labeling of telecommunications cable tag identifiers shall be in accordance with EIA TIA/EIA-606-A. Do not provide handwritten letters. Install cable tags so that they are clearly visible without disturbing any cabling or wiring in the manholes, handholes, and vaults.

### 3.3 FIELD APPLIED PAINTING

Provide ferrous metallic enclosure finishes in accordance with the following procedures. Ensure that surfaces are dry and clean when the coating is applied. Coat joints and crevices. Prior to assembly, paint surfaces which will be concealed or inaccessible after assembly. Apply primer and finish coat in accordance with the manufacturer's recommendations.

#### 3.3.1 Cleaning

Clean surfaces in accordance with SSPC SP 6.

#### 3.3.2 Priming

Prime with a two component polyamide epoxy primer which has a bisphenol-A base, a minimum of 60 percent solids by volume, and an ability to build up a minimum dry film thickness on a vertical surface of 5.0 mils. Apply in two coats to a total dry film thickness of 5 to 8 mils.

#### 3.3.3 Finish Coat

Finish with a two component urethane consisting of saturated polyester polyol resin mixed with aliphatic isocyanate which has a minimum of 50 percent solids by volume. Apply to a minimum dry film thickness of 2 to 3 mils. Color shall be the manufacturer's standard.

### 3.4 FIELD FABRICATED NAMEPLATE MOUNTING

Provide number, location, and letter designation of nameplates as indicated. Fasten nameplates to the device with a minimum of two sheet-metal screws or two rivets.

### 3.5 FIELD QUALITY CONTROL

Provide the Contracting Officer 10 working days notice prior to each test. Provide labor, equipment, and incidentals required for testing. Correct defective material and workmanship disclosed as the results of the tests. Furnish a signed copy of the test results to the Contracting Officer within 3 working days after the tests for each segment of construction are completed. Perform testing as construction progresses and do not wait until all construction is complete before starting field tests.

#### 3.5.1 Pre-Installation Tests

Perform the following tests on cable at the job site before it is removed from the cable reel. For cables with factory installed pulling eyes, these tests shall be performed at the factory and certified test results shall accompany the cable.

##### 3.5.1.1 Cable Capacitance

Perform capacitance tests on at least 10 percent of the pairs within a cable to determine if cable capacitance is within the limits specified.

##### 3.5.1.2 Loop Resistance

Perform DC-loop resistance on at least 10 percent of the pairs within a cable to determine if DC-loop resistance is within the manufacturer's calculated resistance.

#### 3.5.1.3 Pre-Installation Test Results

Provide results of pre-installation tests to the Contracting Officer at least 5 working days before installation is to start. Results shall indicate reel number of the cable, manufacturer, size of cable, pairs tested, and recorded readings. When pre-installation tests indicate that cable does not meet specifications, remove cable from the job site.

#### 3.5.2 Acceptance Tests

Perform acceptance testing in accordance with RUS Bul 1753F-201 and as further specified in this section. Provide personnel, equipment, instrumentation, and supplies necessary to perform required testing. Notification of any planned testing shall be given to the Contracting Officer at least 14 days prior to any test unless specified otherwise. Testing shall not proceed until after the Contractor has received written Contracting Officer's approval of the test plans as specified. Test plans shall define the tests required to ensure that the system meets technical, operational, and performance specifications. The test plans shall define milestones for the tests, equipment, personnel, facilities, and supplies required. The test plans shall identify the capabilities and functions to be tested. Provide test reports in booklet form showing all field tests performed, upon completion and testing of the installed system. Measurements shall be tabulated on a pair by pair or strand by strand basis.

##### 3.5.2.1 Copper Conductor Cable

Perform the following acceptance tests in accordance with EIA TIA/EIA-758:

- a. Wire map (pin to pin continuity)
- b. Continuity to remote end
- c. Crossed pairs
- d. Reversed pairs
- e. Split pairs
- f. Shorts between two or more conductors

##### 3.5.2.2 Fiber Optic Cable

Test fiber optic cable in accordance with EIA EIA/TIA-455-B and as further specified in this section. Two optical tests shall be performed on all optical fibers: Optical Time Domain Reflectometry (OTDR) Test, and Attenuation Test. In addition, a Bandwidth Test shall be performed on all multimode optical fibers. These tests shall be performed on the completed end-to-end spans which include the near-end pre-connectorized single fiber cable assembly, outside plant as specified, and the far-end pre-connectorized single fiber cable assembly.

- a. OTDR Test: The OTDR test shall be used to determine the adequacy of the cable installations by showing any irregularities, such as discontinuities, micro-bendings or improper splices for the cable span under test. Hard copy fiber signature records shall be obtained from the OTDR for each fiber in each span and shall be included in the test results. The OTDR test shall be measured in both directions. A reference length of fiber, 66 feet minimum, used as the delay line shall be placed before the new end connector and after the far end patch panel connectors for inspection of connector signature. Conduct OTDR test and provide calculation or interpretation of results in accordance with EIA TIA/EIA-526-7 for single-mode fiber and EIA TIA/EIA-526-14A for multimode fiber. Splice losses shall not exceed 0.3 db.
- b. Attenuation Test: End-to-end attenuation measurements shall be made on all fibers, in both directions, using a 1310 or 1550 nanometer light source at one end and the optical power meter on the other end to verify that the cable system attenuation requirements are met in accordance with EIA TIA/EIA-526-7 for single-mode fiber optic cables. The measurement method shall be in accordance with EIA TIA/EIA-455-61A. Attenuation losses shall not exceed 0.5 db/km at 1310 nm and 1550 nm for single-mode fiber.
- c. Bandwidth Test: The end-to-end bandwidth of all multimode fiber span links shall be measured by the frequency domain method. The bandwidth shall be measured in both directions on all fibers. The bandwidth measurements shall be in accordance with EIA TIA/EIA-455-204.

-- End of Section --



FORM FOR SECTIONS 9 (a) and (b) BEASON-HAMMON ALABAMA TAXPAYER AND CITIZEN PROTECTION ACT; CODE OF ALABAMA, SECTIONS 31-13-9 (a) and (b)

AFFIDAVIT FOR BUSINESS ENTITY/EMPLOYER /CONTRACTOR

(To be completed as a condition for the award of any contract, grant, or incentive by the State of Alabama, any political subdivision thereof, or any state-funded entity to a business entity or employer that employs one or more employees)

State of Alabama

County of Limestone

Before me, a notary public, personally appeared Maggie Williams (print name) who, being duly sworn, says as follows:

As a condition for the award of any contract, grant, or incentive by the State of Alabama, any political subdivision thereof, or any state-funded entity to a business entity or employer that employs one or more employees, I hereby attest that in my capacity as Secretary (state position) for Christopher Professional Enterprise Inc (state business entity/employer/contractor name) that said business entity/employer/contractor shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien.

I further attest that said business entity/employer/contractor is enrolled in the E-Verify program. (ATTACH DOCUMENTATION ESTABLISHING THAT BUSINESS ENTITY/EMPLOYER/CONTRACTOR IS ENROLLED IN THE E-VERIFY PROGRAM)

Maggie C. Williams Signature of Affiant

Sworn to and subscribed before me this 2nd day of February, 2012.

I certify that the affiant is known (or made known) to me to be the identical party he or she claims to be.

[Signature] Signature and Seal of Notary Public  
My Comm. Expire Jan 21, 2013





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## THE E-VERIFY PROGRAM FOR EMPLOYMENT VERIFICATION MEMORANDUM OF UNDERSTANDING

### ARTICLE I

#### PURPOSE AND AUTHORITY

This Memorandum of Understanding (MOU) sets forth the points of agreement between the Department of Homeland Security (DHS) and Christopher Professional Enterprises, Inc (Employer) regarding the Employer's participation in the Employment Eligibility Verification Program (E-Verify). This MOU explains certain features of the E-Verify program and enumerates specific responsibilities of DHS, the Social Security Administration (SSA), and the Employer. E-Verify is a program that electronically confirms an employee's eligibility to work in the United States after completion of the Employment Eligibility Verification Form (Form I-9). For covered government contractors, E-Verify is used to verify the employment eligibility of all newly hired employees and all existing employees assigned to Federal contracts or to verify the entire workforce if the contractor so chooses.

Authority for the E-Verify program is found in Title IV, Subtitle A, of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), Pub. L. 104-208, 110 Stat. 3009, as amended (8 U.S.C. § 1324a note). Authority for use of the E-Verify program by Federal contractors and subcontractors covered by the terms of Subpart 22.18, "Employment Eligibility Verification", of the Federal Acquisition Regulation (FAR) (hereinafter referred to in this MOU as a "Federal contractor with the FAR E-Verify clause") to verify the employment eligibility of certain employees working on Federal contracts is also found in Subpart 22.18 and in Executive Order 12989, as amended.

### ARTICLE II

#### FUNCTIONS TO BE PERFORMED

##### A. RESPONSIBILITIES OF SSA

1. SSA agrees to provide the Employer with available information that allows the Employer to confirm the accuracy of Social Security Numbers provided by all employees verified under this MOU and the employment authorization of U.S. citizens.
2. SSA agrees to provide to the Employer appropriate assistance with operational problems that may arise during the Employer's participation in the E-Verify program. SSA agrees to provide the Employer with names, titles, addresses, and telephone numbers of SSA representatives to be contacted during the E-Verify process.
3. SSA agrees to safeguard the information provided by the Employer through the E-Verify program procedures, and to limit access to such information, as is appropriate by law, to individuals responsible for the verification of Social Security Numbers and for evaluation of the E-Verify program or such other persons or entities who may be authorized by SSA as governed



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by the Privacy Act (5 U.S.C. § 552a), the Social Security Act (42 U.S.C. 1306(a)), and SSA regulations (20 CFR Part 401).

4. SSA agrees to provide a means of automated verification that is designed (in conjunction with DHS's automated system if necessary) to provide confirmation or tentative nonconfirmation of U.S. citizens' employment eligibility within 3 Federal Government work days of the initial inquiry.

5. SSA agrees to provide a means of secondary verification (including updating SSA records as may be necessary) for employees who contest SSA tentative nonconfirmations that is designed to provide final confirmation or nonconfirmation of U.S. citizens' employment eligibility and accuracy of SSA records for both citizens and non-citizens within 10 Federal Government work days of the date of referral to SSA, unless SSA determines that more than 10 days may be necessary. In such cases, SSA will provide additional verification instructions.

## **B. RESPONSIBILITIES OF DHS**

1. After SSA verifies the accuracy of SSA records for employees through E-Verify, DHS agrees to provide the Employer access to selected data from DHS's database to enable the Employer to conduct, to the extent authorized by this MOU:

- Automated verification checks on employees by electronic means, and
- Photo verification checks (when available) on employees.

2. DHS agrees to provide to the Employer appropriate assistance with operational problems that may arise during the Employer's participation in the E-Verify program. DHS agrees to provide the Employer names, titles, addresses, and telephone numbers of DHS representatives to be contacted during the E-Verify process.

3. DHS agrees to make available to the Employer at the E-Verify Web site and on the E-Verify Web browser, instructional materials on E-Verify policies, procedures and requirements for both SSA and DHS, including restrictions on the use of E-Verify. DHS agrees to provide training materials on E-Verify.

4. DHS agrees to provide to the Employer a notice, which indicates the Employer's participation in the E-Verify program. DHS also agrees to provide to the Employer anti-discrimination notices issued by the Office of Special Counsel for Immigration-Related Unfair Employment Practices (OSC), Civil Rights Division, U.S. Department of Justice.

5. DHS agrees to issue the Employer a user identification number and password that permits the Employer to verify information provided by employees with DHS's database.

6. DHS agrees to safeguard the information provided to DHS by the Employer, and to limit access to such information to individuals responsible for the verification of employees' employment eligibility and for evaluation of the E-Verify program, or to such other persons or entities as may be authorized by applicable law. Information will be used only to verify the accuracy of Social Security Numbers and employment eligibility, to enforce the Immigration and



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Nationality Act (INA) and Federal criminal laws, and to administer Federal contracting requirements.

7. DHS agrees to provide a means of automated verification that is designed (in conjunction with SSA verification procedures) to provide confirmation or tentative nonconfirmation of employees' employment eligibility within 3 Federal Government work days of the initial inquiry.

8. DHS agrees to provide a means of secondary verification (including updating DHS records as may be necessary) for employees who contest DHS tentative nonconfirmations and photo non-match tentative nonconfirmations that is designed to provide final confirmation or nonconfirmation of the employees' employment eligibility within 10 Federal Government work days of the date of referral to DHS, unless DHS determines that more than 10 days may be necessary. In such cases, DHS will provide additional verification instructions.

### **C. RESPONSIBILITIES OF THE EMPLOYER**

1. The Employer agrees to display the notices supplied by DHS in a prominent place that is clearly visible to prospective employees and all employees who are to be verified through the system.

2. The Employer agrees to provide to the SSA and DHS the names, titles, addresses, and telephone numbers of the Employer representatives to be contacted regarding E-Verify.

3. The Employer agrees to become familiar with and comply with the most recent version of the E-Verify User Manual.

4. The Employer agrees that any Employer Representative who will perform employment verification queries will complete the E-Verify Tutorial before that individual initiates any queries.

A. The Employer agrees that all Employer representatives will take the refresher tutorials initiated by the E-Verify program as a condition of continued use of E-Verify.

B. Failure to complete a refresher tutorial will prevent the Employer from continued use of the program.

5. The Employer agrees to comply with current Form I-9 procedures, with two exceptions:

- If an employee presents a "List B" identity document, the Employer agrees to only accept "List B" documents that contain a photo. (List B documents identified in 8 C.F.R. § 274a.2(b)(1)(B)) can be presented during the Form I-9 process to establish identity.) If an employee objects to the photo requirement for religious reasons, the Employer should contact E-Verify at 888-464-4218.

- If an employee presents a DHS Form I-551 (Permanent Resident Card) or Form I-766 (Employment Authorization Document) to complete the Form I-9, the Employer agrees to make a photocopy of the document and to retain the photocopy with the employee's Form I-9. The photocopy must be of sufficient quality to allow for verification of the photo



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and written information. The employer will use the photocopy to verify the photo and to assist DHS with its review of photo non-matches that are contested by employees. Note that employees retain the right to present any List A, or List B and List C, documentation to complete the Form I-9. DHS may in the future designate other documents that activate the photo screening tool.

6. The Employer understands that participation in E-Verify does not exempt the Employer from the responsibility to complete, retain, and make available for inspection Forms I-9 that relate to its employees, or from other requirements of applicable regulations or laws, including the obligation to comply with the antidiscrimination requirements of section 274B of the INA with respect to Form I-9 procedures, except for the following modified requirements applicable by reason of the Employer's participation in E-Verify: (1) identity documents must have photos, as described in paragraph 5 above; (2) a rebuttable presumption is established that the Employer has not violated section 274A(a)(1)(A) of the Immigration and Nationality Act (INA) with respect to the hiring of any individual if it obtains confirmation of the identity and employment eligibility of the individual in good faith compliance with the terms and conditions of E-Verify; (3) the Employer must notify DHS if it continues to employ any employee after receiving a final nonconfirmation, and is subject to a civil money penalty between \$550 and \$1,100 for each failure to notify DHS of continued employment following a final nonconfirmation; (4) the Employer is subject to a rebuttable presumption that it has knowingly employed an unauthorized alien in violation of section 274A(a)(1)(A) if the Employer continues to employ an employee after receiving a final nonconfirmation; and (5) no person or entity participating in E-Verify is civilly or criminally liable under any law for any action taken in good faith based on information provided through the confirmation system. DHS reserves the right to conduct Form I-9 and E-Verify system compliance inspections during the course of E-Verify, as well as to conduct any other enforcement activity authorized by law.

7. The Employer agrees to initiate E-Verify verification procedures for new employees within 3 Employer business days after each employee has been hired (but after the Form I-9 has been completed), and to complete as many (but only as many) steps of the E-Verify process as are necessary according to the E-Verify User Manual, or in the case of Federal contractors with the FAR E-Verify clause, the E-Verify User Manual for Federal Contractors. The Employer is prohibited from initiating verification procedures before the employee has been hired and the Form I-9 completed. If the automated system to be queried is temporarily unavailable, the 3-day time period is extended until it is again operational in order to accommodate the Employer's attempting, in good faith, to make inquiries during the period of unavailability. Employers may initiate verification by notating the Form I-9 in circumstances where the employee has applied for a Social Security Number (SSN) from the SSA and is waiting to receive the SSN, provided that the Employer performs an E-Verify employment verification query using the employee's SSN as soon as the SSN becomes available.

8. The Employer agrees not to use E-Verify procedures for pre-employment screening of job applicants, in support of any unlawful employment practice, or for any other use not authorized by this MOU. Employers must use E-Verify for all new employees, unless an Employer is a Federal contractor that qualifies for the exceptions described in Article II.D.1.c. Except as provided in Article II.D, the Employer will not verify selectively and will not verify employees hired before the effective date of this MOU. The Employer understands that if the Employer





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uses the E-Verify system for any purpose other than as authorized by this MOU, the Employer may be subject to appropriate legal action and termination of its access to SSA and DHS information pursuant to this MOU.

9. The Employer agrees to follow appropriate procedures (see Article III. below) regarding tentative nonconfirmations, including notifying employees in private of the finding and providing them written notice of the findings, providing written referral instructions to employees, allowing employees to contest the finding, and not taking adverse action against employees if they choose to contest the finding. Further, when employees contest a tentative nonconfirmation based upon a photo non-match, the Employer is required to take affirmative steps (see Article III.B. below) to contact DHS with information necessary to resolve the challenge.

10. The Employer agrees not to take any adverse action against an employee based upon the employee's perceived employment eligibility status while SSA or DHS is processing the verification request unless the Employer obtains knowledge (as defined in 8 C.F.R. § 274a.1(i)) that the employee is not work authorized. The Employer understands that an initial inability of the SSA or DHS automated verification system to verify work authorization, a tentative nonconfirmation, a case in continuance (indicating the need for additional time for the government to resolve a case), or the finding of a photo non-match, does not establish, and should not be interpreted as evidence, that the employee is not work authorized. In any of the cases listed above, the employee must be provided a full and fair opportunity to contest the finding, and if he or she does so, the employee may not be terminated or suffer any adverse employment consequences based upon the employee's perceived employment eligibility status (including denying, reducing, or extending work hours, delaying or preventing training, requiring an employee to work in poorer conditions, refusing to assign the employee to a Federal contract or other assignment, or otherwise subjecting an employee to any assumption that he or she is unauthorized to work) until and unless secondary verification by SSA or DHS has been completed and a final nonconfirmation has been issued. If the employee does not choose to contest a tentative nonconfirmation or a photo non-match or if a secondary verification is completed and a final nonconfirmation is issued, then the Employer can find the employee is not work authorized and terminate the employee's employment. Employers or employees with questions about a final nonconfirmation may call E-Verify at 1-888-464-4218 or OSC at 1-800-255-8155 or 1-800-237-2515 (TDD).

11. The Employer agrees to comply with Title VII of the Civil Rights Act of 1964 and section 274B of the INA, as applicable, by not discriminating unlawfully against any individual in hiring, firing, or recruitment or referral practices because of his or her national origin or, in the case of a protected individual as defined in section 274B(a)(3) of the INA, because of his or her citizenship status. The Employer understands that such illegal practices can include selective verification or use of E-Verify except as provided in part D below, or discharging or refusing to hire employees because they appear or sound "foreign" or have received tentative nonconfirmations. The Employer further understands that any violation of the unfair immigration-related employment practices provisions in section 274B of the INA could subject the Employer to civil penalties, back pay awards, and other sanctions, and violations of Title VII could subject the Employer to back pay awards, compensatory and punitive damages. Violations of either section 274B of the INA or Title VII may also lead to the termination of its participation in E-



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Verify. If the Employer has any questions relating to the anti-discrimination provision, it should contact OSC at 1-800-255-8155 or 1-800-237-2515 (TDD).

12. The Employer agrees to record the case verification number on the employee's Form I-9 or to print the screen containing the case verification number and attach it to the employee's Form I-9.

13. The Employer agrees that it will use the information it receives from SSA or DHS pursuant to E-Verify and this MOU only to confirm the employment eligibility of employees as authorized by this MOU. The Employer agrees that it will safeguard this information, and means of access to it (such as PINS and passwords) to ensure that it is not used for any other purpose and as necessary to protect its confidentiality, including ensuring that it is not disseminated to any person other than employees of the Employer who are authorized to perform the Employer's responsibilities under this MOU, except for such dissemination as may be authorized in advance by SSA or DHS for legitimate purposes.

14. The Employer acknowledges that the information which it receives from SSA is governed by the Privacy Act (5 U.S.C. § 552a(i)(1) and (3)) and the Social Security Act (42 U.S.C. 1306(a)), and that any person who obtains this information under false pretenses or uses it for any purpose other than as provided for in this MOU may be subject to criminal penalties.

15. The Employer agrees to cooperate with DHS and SSA in their compliance monitoring and evaluation of E-Verify, including by permitting DHS and SSA, upon reasonable notice, to review Forms I-9 and other employment records and to interview it and its employees regarding the Employer's use of E-Verify, and to respond in a timely and accurate manner to DHS requests for information relating to their participation in E-Verify.

#### **D. RESPONSIBILITIES OF FEDERAL CONTRACTORS WITH THE FAR E-VERIFY CLAUSE**

1. The Employer understands that if it is a subject to the employment verification terms in Subpart 22.18 of the FAR, it must verify the employment eligibility of any existing employee assigned to the contract and all new hires, as discussed in the Supplemental Guide for Federal Contractors. Once an employee has been verified through E-Verify by the Employer, the Employer may not reverify the employee through E-Verify.

a. Federal contractors with the FAR E-Verify clause agree to become familiar with and comply with the most recent versions of the E-Verify User Manual for Federal Contractors and the E-Verify Supplemental Guide for Federal Contractors.

b. Federal contractors with the FAR E-Verify clause agree to complete a tutorial for Federal contractors with the FAR E-Verify clause.

c. Federal contractors with the FAR E-Verify clause not enrolled at the time of contract award: An Employer that is not enrolled in E-Verify at the time of a contract award must enroll as a Federal contractor with the FAR E-Verify clause in E-Verify within 30 calendar days of contract award and, within 90 days of enrollment, begin to use E-Verify to initiate verification of employment eligibility of new hires of the Employer who are working in the United States,





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whether or not assigned to the contract. Once the Employer begins verifying new hires, such verification of new hires must be initiated within 3 business days after the date of hire. Once enrolled in E-Verify as a Federal contractor with the FAR E-Verify clause, the Employer must initiate verification of employees assigned to the contract within 90 calendar days from the time of enrollment in the system and after the date and selecting which employees will be verified in E-Verify or within 30 days of an employee's assignment to the contract, whichever date is later.

d. Employers that are already enrolled in E-Verify at the time of a contract award but are not enrolled in the system as a Federal contractor with the FAR E-Verify clause: Employers enrolled in E-Verify for 90 days or more at the time of a contract award must use E-Verify to initiate verification of employment eligibility for new hires of the Employer who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire. Employers enrolled in E-Verify as other than a Federal contractor with the FAR E-Verify clause, must update E-Verify to indicate that they are a Federal contractor with the FAR E-Verify clause within 30 days after assignment to the contract. If the Employer is enrolled in E-Verify for 90 calendar days or less at the time of contract award, the Employer must, within 90 days of enrollment, begin to use E-Verify to initiate verification of new hires of the contractor who are working in the United States, whether or not assigned to the contract. Such verification of new hires must be initiated within 3 business days after the date of hire. An Employer enrolled as a Federal contractor with the FAR E-Verify clause in E-Verify must initiate verification of each employee assigned to the contract within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever is later.

e. Institutions of higher education, State, local and tribal governments and sureties: Federal contractors with the FAR E-Verify clause that are institutions of higher education (as defined at 20 U.S.C. 1001(a)), State or local governments, governments of Federally recognized Indian tribes, or sureties performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond may choose to only verify new and existing employees assigned to the Federal contract. Such Federal contractors with the FAR E-Verify clause may, however, elect to verify all new hires, and/or all existing employees hired after November 6, 1986. The provisions of Article II.D, paragraphs 1.a and 1.b of this MOU providing timeframes for initiating employment verification of employees assigned to a contract apply to such institutions of higher education, State, local and tribal governments, and sureties.

f. Verification of all employees: Upon enrollment, Employers who are Federal contractors with the FAR E-Verify clause may elect to verify employment eligibility of all existing employees working in the United States who were hired after November 6, 1986, instead of verifying only new employees and those existing employees assigned to a covered Federal contract. After enrollment, Employers must elect to do so only in the manner designated by DHS and initiate E-Verify verification of all existing employees within 180 days after the election.

g. Form I-9 procedures for existing employees of Federal contractors with the FAR E-Verify clause: Federal contractors with the FAR E-Verify clause may choose to complete new Forms I-9 for all existing employees other than those that are completely exempt from this process. Federal contractors with the FAR E-Verify clause may also update previously completed Forms I-9 to initiate E-Verify verification of existing employees who are not completely exempt as long as that Form I-9 is complete (including the SSN), complies with



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Article II.C.5, the employee's work authorization has not expired, and the Employer has reviewed the information reflected in the Form I-9 either in person or in communications with the employee to ensure that the employee's stated basis in section 1 of the Form I-9 for work authorization has not changed (including, but not limited to, a lawful permanent resident alien having become a naturalized U.S. citizen). If the Employer is unable to determine that the Form I-9 complies with Article II.C.5, if the employee's basis for work authorization as attested in section 1 has expired or changed, or if the Form I-9 contains no SSN or is otherwise incomplete, the Employer shall complete a new I-9 consistent with Article II.C.5, or update the previous I-9 to provide the necessary information. If section 1 of the Form I-9 is otherwise valid and up-to-date and the form otherwise complies with Article II.C.5, but reflects documentation (such as a U.S. passport or Form I-551) that expired subsequent to completion of the Form I-9, the Employer shall not require the production of additional documentation, or use the photo screening tool described in Article II.C.5, subject to any additional or superseding instructions that may be provided on this subject in the Supplemental Guide for Federal Contractors. Nothing in this section shall be construed to require a second verification using E-Verify of any assigned employee who has previously been verified as a newly hired employee under this MOU, or to authorize verification of any existing employee by any Employer that is not a Federal contractor with the FAR E-Verify clause.

2. The Employer understands that if it is a Federal contractor with the FAR E-Verify clause, its compliance with this MOU is a performance requirement under the terms of the Federal contract or subcontract, and the Employer consents to the release of information relating to compliance with its verification responsibilities under this MOU to contracting officers or other officials authorized to review the Employer's compliance with Federal contracting requirements.

### **ARTICLE III**

## **REFERRAL OF INDIVIDUALS TO SSA AND DHS**

### **A. REFERRAL TO SSA**

1. If the Employer receives a tentative nonconfirmation issued by SSA, the Employer must print the notice as directed by the E-Verify system and provide it to the employee so that the employee may determine whether he or she will contest the tentative nonconfirmation. The Employer must review the tentative nonconfirmation with the employee in private.

2. The Employer will refer employees to SSA field offices only as directed by the automated system based on a tentative nonconfirmation, and only after the Employer records the case verification number, reviews the input to detect any transaction errors, and determines that the employee contests the tentative nonconfirmation. The Employer will transmit the Social Security Number to SSA for verification again if this review indicates a need to do so. The Employer will determine whether the employee contests the tentative nonconfirmation as soon as possible after the Employer receives it.

3. If the employee contests an SSA tentative nonconfirmation, the Employer will provide the employee with a system-generated referral letter and instruct the employee to visit an SSA office within 8 Federal Government work days. SSA will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it



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determines that more than 10 days is necessary. The Employer agrees to check the E-Verify system regularly for case updates.

4. The Employer agrees not to ask the employee to obtain a printout from the Social Security Number database (the Numident) or other written verification of the Social Security Number from the SSA.

## **B. REFERRAL TO DHS**

1. If the Employer receives a tentative nonconfirmation issued by DHS, the Employer must print the tentative nonconfirmation notice as directed by the E-Verify system and provide it to the employee so that the employee may determine whether he or she will contest the tentative nonconfirmation. The Employer must review the tentative nonconfirmation with the employee in private.

2. If the Employer finds a photo non-match for an employee who provides a document for which the automated system has transmitted a photo, the employer must print the photo non-match tentative nonconfirmation notice as directed by the automated system and provide it to the employee so that the employee may determine whether he or she will contest the finding. The Employer must review the tentative nonconfirmation with the employee in private.

3. The Employer agrees to refer individuals to DHS only when the employee chooses to contest a tentative nonconfirmation received from DHS automated verification process or when the Employer issues a tentative nonconfirmation based upon a photo non-match. The Employer will determine whether the employee contests the tentative nonconfirmation as soon as possible after the Employer receives it.

4. If the employee contests a tentative nonconfirmation issued by DHS, the Employer will provide the employee with a referral letter and instruct the employee to contact DHS through its toll-free hotline (as found on the referral letter) within 8 Federal Government work days.

5. If the employee contests a tentative nonconfirmation based upon a photo non-match, the Employer will provide the employee with a referral letter to DHS. DHS will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary. The Employer agrees to check the E-Verify system regularly for case updates.

6. The Employer agrees that if an employee contests a tentative nonconfirmation based upon a photo non-match, the Employer will send a copy of the employee's Form I-551 or Form I-766 to DHS for review by:

- Scanning and uploading the document, or
- Sending a photocopy of the document by an express mail account (paid for at employer expense).

7. If the Employer determines that there is a photo non-match when comparing the photocopied List B document described in Article II.C.5 with the image generated in E-Verify, the Employer must forward the employee's documentation to DHS using one of the means described in the preceding paragraph, and allow DHS to resolve the case.



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#### **ARTICLE IV**

##### **SERVICE PROVISIONS**

SSA and DHS will not charge the Employer for verification services performed under this MOU. The Employer is responsible for providing equipment needed to make inquiries. To access E-Verify, an Employer will need a personal computer with Internet access.

#### **ARTICLE V**

##### **PARTIES**

A. This MOU is effective upon the signature of all parties, and shall continue in effect for as long as the SSA and DHS conduct the E-Verify program unless modified in writing by the mutual consent of all parties, or terminated by any party upon 30 days prior written notice to the others. Any and all system enhancements to the E-Verify program by DHS or SSA, including but not limited to the E-Verify checking against additional data sources and instituting new verification procedures, will be covered under this MOU and will not cause the need for a supplemental MOU that outlines these changes. DHS agrees to train employers on all changes made to E-Verify through the use of mandatory refresher tutorials and updates to the E-Verify User Manual, the E-Verify User Manual for Federal Contractors or the E-Verify Supplemental Guide for Federal Contractors. Even without changes to E-Verify, DHS reserves the right to require employers to take mandatory refresher tutorials. An Employer that is a Federal contractor with the FAR E-Verify clause may terminate this MOU when the Federal contract that requires its participation in E-Verify is terminated or completed. In such a circumstance, the Federal contractor with the FAR E-Verify clause must provide written notice to DHS. If an Employer that is a Federal contractor with the FAR E-Verify clause fails to provide such notice, that Employer will remain a participant in the E-Verify program, will remain bound by the terms of this MOU that apply to participants that are not Federal contractors with the FAR E-Verify clause, and will be required to use the E-Verify procedures to verify the employment eligibility of all newly hired employees.

B. Notwithstanding Article V, part A of this MOU, DHS may terminate this MOU if deemed necessary because of the requirements of law or policy, or upon a determination by SSA or DHS that there has been a breach of system integrity or security by the Employer, or a failure on the part of the Employer to comply with established procedures or legal requirements. The Employer understands that if it is a Federal contractor with the FAR E-Verify clause, termination of this MOU by any party for any reason may negatively affect its performance of its contractual responsibilities.

C. Some or all SSA and DHS responsibilities under this MOU may be performed by contractor(s), and SSA and DHS may adjust verification responsibilities between each other as they may determine necessary. By separate agreement with DHS, SSA has agreed to perform its responsibilities as described in this MOU.



**Company ID Number: 398167**

D. Nothing in this MOU is intended, or should be construed, to create any right or benefit, substantive or procedural, enforceable at law by any third party against the United States, its agencies, officers, or employees, or against the Employer, its agents, officers, or employees.

E. Each party shall be solely responsible for defending any claim or action against it arising out of or related to E-Verify or this MOU, whether civil or criminal, and for any liability wherefrom, including (but not limited to) any dispute between the Employer and any other person or entity regarding the applicability of Section 403(d) of IIRIRA to any action taken or allegedly taken by the Employer.

F. The Employer understands that the fact of its participation in E-Verify is not confidential information and may be disclosed as authorized or required by law and DHS or SSA policy, including but not limited to, Congressional oversight, E-Verify publicity and media inquiries, determinations of compliance with Federal contractual requirements, and responses to inquiries under the Freedom of Information Act (FOIA).

G. The foregoing constitutes the full agreement on this subject between DHS and the Employer.

H. The individuals whose signatures appear below represent that they are authorized to enter into this MOU on behalf of the Employer and DHS respectively.





Company ID Number: 398167

To be accepted as a participant in E-Verify, you should only sign the Employer's Section of the signature page. If you have any questions, contact E-Verify at 888-464-4218.

**Employer Christopher Professional Enterprises, Inc**

**Maggie Williams**

Name (Please Type or Print)

Title

**Electronically Signed**

**03/07/2011**

Signature

Date

**Department of Homeland Security – Verification Division**

**USCIS Verification Division**

Name (Please Type or Print)

Title

**Electronically Signed**

**03/07/2011**

Signature

Date

**Information Required for the E-Verify Program**

**Information relating to your Company:**

|                                 |                                           |
|---------------------------------|-------------------------------------------|
| Company Name:                   | Christopher Professional Enterprises, Inc |
| Company Facility Address:       | 15981 Reid Rd                             |
|                                 | Athens, AL 35611                          |
| Company Alternate Address:      | P.O. Box 247                              |
|                                 | Athens, AL 35612                          |
| County or Parish:               | LIMESTONE                                 |
| Employer Identification Number: | 264407825                                 |



Company ID Number: 398167

|                                                                                                                                                                                           |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| North American Industry Classification Systems Code:                                                                                                                                      | 237      |
| Administrator:                                                                                                                                                                            |          |
| Number of Employees:                                                                                                                                                                      | 10 to 19 |
| Number of Sites Verified for:                                                                                                                                                             | 1        |
| <p>Are you verifying for more than 1 site? If yes, please provide the number of sites verified for in each State:</p> <ul style="list-style-type: none"> <li>ALABAMA 1 site(s)</li> </ul> |          |

Information relating to the Program Administrator(s) for your Company on policy questions or operational problems:

|                   |                      |             |                  |
|-------------------|----------------------|-------------|------------------|
| Name:             | Maggie Williams      | Fax Number: | (256) 232 - 4446 |
| Telephone Number: | (256) 232 - 4460     |             |                  |
| E-mail Address:   | mgs2610cpe@yahoo.com |             |                  |



**SUPPLEMENT TO GENERAL REQUIREMENTS  
FOR  
CONSTRUCTION OF PUBLIC IMPROVEMENTS  
MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL (ELECTRICAL RELOCATION PHASE)  
PROJECT NO. 65-10-RD09  
CITY OF HUNTSVILLE, ALABAMA**

SUPPLEMENT TO GENERAL REQUIREMENTS1. GENERAL

The attention of all bidders is called to Code of Alabama §§ 34-8-1 and 34-8-2 (1975) AND 34-8-1, 34-8-2, 34-8-4, 34-8-6, 34-8-7, 34-8-8 AND 34-8-9 (AMENDED 1996) setting forth the definition of general contractor and the licensing procedures and requirements for state licensing. No one is entitled to bid and no contract may be awarded to anyone who does not possess a valid general contractor's license and the required classification for the municipal type work to be performed. The general contractor's State of Alabama license and classification must appear on the outside of the bid envelope along with the general contractor's name and address, project name and number and date and time of bid opening. Failure to provide this will be cause to reject the bid.

In determining the successful bidder, the Owner will consider in addition to the bid prices, such responsibility factors as characteristics and responsibility, skill, experience, record of integrity in business, and of performance offered and past record of performance on Owner contracts on other similar projects. Any other factors not specifically mentioned or provided for herein, in addition to that of the bid price which would affect the final cost to the Owner, will be taken into consideration in making award of contract. The right is reserved to reject any bid where investigation of the business and technical organization of the bidder available for the contemplated work, including financial resources, equipment, and experience on similar projects does not satisfy the Owner that such bidder is qualified to perform the work. The City Council of the City of Huntsville reserves the right to reject any and all bids and to waive informalities.

Separate sealed bids for the construction of this project shall be accompanied by Bid Bond in the amount of five percent (5%) of the amount of the bid not to exceed \$10,000.00. Quantities are known as Attachment "A". No bidder may withdraw his bid within ninety (90) days after the actual date of opening. These specifications, the supplemental specifications, the plans, special provisions and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions, unless obviously incorrect, shall govern over scaled dimensions. Supplemental Specifications shall govern over the Standard Specifications for Construction of Public Improvements Contract Projects. Plans shall govern over Standard Specifications for Construction of Public Improvements Contract Projects. Special Provisions shall govern over Standard Specifications for Construction of Public Improvements Contract Projects, Supplemental Specifications, and Plans. All bid openings and any scheduled pre-bid conferences are open to the public and will be held in the Public Services Conference Room on the 1st Floor at 320 Fountain Circle unless otherwise noted.

All references to OWNER shall mean City of Huntsville, Alabama. All references to City Engineer shall mean OWNER.

2. PROPOSAL PREPARATION

(A) Proposal Form. The bidder's proposal must be submitted on the complete original proposal form furnished him by the City. Unless otherwise provided in the proposal, joint venturers may submit a proposal for a joint venture of qualified bidders on a proposal form issued to one of them, provided each venturer has taken out a proposal and provided the proposal is signed by each co-venturer.

(B) Details. On the proposal form, the bidder shall enter in numbers a unit price and the extended amount bid (unit price x quantity) in the appropriate column for each bid item, exclusive of those items for which a fixed contract unit price and extension amount are shown. On lump sum items an entry shall be shown in the amount bid column. If a bidder wishes to bid an item free, then he shall enter 0 (zero) in both the unit price column and amount bid column. After all extensions are made, the bidder shall total the extended amounts of the bid items and show his total bid amount in the appropriate place on the proposal form. All figures shall be legibly shown in ink or typed. Any interlineation, erasure or other alteration of a figure shall be initialed by the signer of the proposal. The City will check the extension of each item given in the proposal and correct all errors and discrepancies. In case of a discrepancy between a unit bid price and the extension amount, the unit price shall govern. The sum of the extension amounts will be the contract bid price. The undersigned bidder further understands that any deletions or additions designated on the outside of the bid envelope, must indicate the particular bid item relative to the deletion or addition, even if the deletion or addition references to deduct or add to the Total Base Bid.

(C) Signing. The bidder's proposal must be signed with ink by the individual, by one or more members of the partnership, by one or more members or officers of each firm representing a joint venture, or by one or more officers of a corporation or by an agent of the Contractor legally qualified and acceptable to the City. If the proposal is made by an individual, his name and post office address must be shown; by a partnership, the name and post office address of each partnership member must be shown; as a joint venture, the name and post office address of each member or officer of the firms represented by the joint venture must be shown; by a corporation, the name of the corporation and the business address of its corporate officials must be shown. The proposal bid bond, if bid bond is tendered, shall be properly signed by the bidder and the surety.

(D) Irregular Proposals. Proposals will be considered irregular and will be rejected if they contain any omissions, alteration of form, additions not called for, incomplete bids (includes failure to enter a unit bid price on a bid item or, in the case of an alternate, the alternate being bid by the Contractor), interlineations, erasures or alterations not initialed by the person signing the proposal, or other irregularities of any kind. Bids that are not signed will be considered non-responsive and will be rejected. No proposal will be opened that does not contain the contractor's Alabama State license number. Proposals may

be rejected at any time prior to the execution of the contract. Any bidder using the same or different names for submitting more than one proposal upon any project will be disqualified from further consideration on that project.

(E) Delivery of Proposals. Each proposal for each contract shall be placed, together with the proposal guaranty, in a sealed envelope on the outside of which is written in large letters "Proposals for Work" and so marked as to indicate the project name, project number, bidder name, and State license number. Proposals will be received by the OWNER or his representative unless otherwise provided until the hour and date set in the notice to Contractors for the opening thereof. No proposal will be considered which has not been received prior to the hour and date set for the opening of bids. Proposals received after that time will be returned. No proposal will be opened that does not contain the contractor's Alabama State license number.

### 3. QUANTITIES

The undersigned bidder understands that when unit prices are called for, the quantities shown herein are approximate only and are subject to increase or decrease, and offers to do the work whether the quantities are increased, or decreased, at the unit prices stated in the proposal. Any substantial changes requiring an increase must be approved by change order prior to work and authorized by City Council Action. The undersigned bidder also understands that when lump sum bids are called for, he will be required to furnish all equipment, labor, material and other items or cost to construct a complete facility. See Attachment "A" - Bid Quantities or revised Attachment if quantities have changed after pre-bid meeting.

### 4. CHANGE ORDERS

#### (A) Changes in the Work

Without invalidating the agreement, the owner may, at any time or from time to time, order additions, deletions or revisions in the work; these will be authorized by change orders. Upon receipt of a change order, the contractor will proceed with the work involved. All such work shall be executed under the applicable conditions of the contract documents. A change order signed by the contractor indicates his agreement.

The OWNER may authorize minor changes or alterations in the work not involving extra cost and not inconsistent with the overall intent of the contract documents. These may be accomplished by a field order.

Additional work performed by the contractor without authorization of a change order will not entitle him to an increase in the contract price or an extension of the contract time, except in the case of an emergency.

The owner will execute appropriate change orders prepared by the engineer covering changes in the work to be performed and work performed in an emergency and any other claim of the contractor for a change in the contract time or the contract price which shall be approved by the OWNER.

It is the contractor's responsibility to notify his surety of any changes affecting the general scope of the work or change in the contract price and the amount of the applicable bonds shall be adjusted accordingly. The contractor will furnish proof of such adjustment to the owner.

#### (B) Change of Contract Price.

The contract price may only be changed by a change order. Any claim for additional compensation shall be based on written notice delivered to the Owner and Engineer within ten days of the occurrence of the event giving rise to the claim. Notice of the extent of the claim with supporting data shall be delivered within forty-five days of such occurrence unless OWNER allows an additional period of time to ascertain more accurate data. The contract price constitutes the total compensation payable to the contractor for performing the work. All duties, responsibilities and obligations assigned to or undertaken by the contractor shall be at his expense without changing the contract price. The owner may at any time without notice to the sureties, by written order designated or indicated to be a change order, make any change in the work within the general scope of the contract, including but not limited to changes: (1) in the specifications (including drawings and designs); (2) in the method or manner of performance of the work; (3) in the owner-furnished facilities, equipment, materials, services, or site; or (4) directing acceleration in the performance of the work. Any other written order or an oral order from the owner which causes any such change, shall be treated as a change order under this clause, provided that the contractor gives the owner written notice stating the date, circumstances, and source of the order and that the contractor regards the order as a change order.

#### (C) Change in the Contract Time.

The contract time may only be changed by a change order. Any claim for an extension in the contract time shall be based on written notice delivered to the owner and engineer within ten days of the occurrence of the event giving rise to the claim. Notice of the extent of the claim with supporting data shall be delivered within forty-five days of such occurrence unless OWNER allows an additional period of time to ascertain more accurate data. All claims for adjustment in the contract time shall be determined by OWNER if owner and contractor cannot otherwise agree. Any change in the contract time resulting from any such claim shall be incorporated in a change order. The contract time will be extended in an amount equal to time lost due to delays beyond the control of contractor if he makes a claim as provided above. Such delays shall include, but not be restricted to, acts or neglect by any separate contractor employed by owner, fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.

All time limits stated in the contract documents are of the essence of the agreement. The provisions shall not exclude recovery for damages (including compensation for additional professional services) for delay by either party. No claim for delay shall be allowed because of failure to furnish drawings until two weeks after demand for such drawings and not then unless such claim be reasonable.

**(D) Time extension for abnormal weather conditions**

In order for the owner to award a time extension for abnormal weather, the following conditions must be satisfied:

1. The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.
2. The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without fault or negligence of the contractor.

The following table of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) and similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractors normal progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities. The contractor's bid shall include the impact of the anticipated lost days in his quotation for the time he is to be on site.

| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 11  | 8   | 6   | 4   | 4   | 5   | 6   | 4   | 4   | 3   | 4   | 8   |

Actual adverse weather delay days must prevent work on critical activities for 50% or more of the contractors scheduled work day before it is considered a weather delay day.

**5. MAINTAIN OFFICE**

The successful contractor shall establish an office in Huntsville, Alabama, with telephone service, and shall maintain close liaison with the OWNER.

**6. SUBCONTRACTORS**

The prime contractor shall be responsible for all work covered under the executed contract; therefore, this responsibility cannot be shifted by subcontracting the work to others. All subcontractors shall be approved by the OWNER. A list of all subcontractors proposed for use on the project shall be provided to at the time that bids are received. This document will be known as ATTACHMENT "C". Lien waivers will be required from all subcontractors at the time of submittal of the final payment request.

All subcontractors must be approved in writing by Owner. If the subs listed on Attachment "C" are approved by the Owner, you will be notified in your notice to proceed. Any additional subcontractors needed during the contract period shall be approved by written letter from the owner. If subcontractors are not approved, you will be notified prior to approval of contract by City Council. See Section 39 for Correction to City of Huntsville Standards Specifications for Construction.

**7. BID BOND**

Accompanying this proposal is a certified check or original signed, dated and sealed, bid bond in the amount of not less than five per (5%) of the total amount shown on the schedule of prices not exceeding \$10,000.00 dollars, payable to the City of Huntsville, Alabama, which is to be forfeited, as liquidated damages, if, in the event that his proposal is accepted, the undersigned shall fail to execute the contract and furnish a satisfactory contract bond under the conditions and within the time specified in this proposal; otherwise, said certified check or bid bond is to be returned to the undersigned.

**8. N/A**

**9. LIABILITY INSURANCE (SEE ALSO ATTACHED INSURANCE FOR CONTRACTORS, WHICH IS SHOWN AS SECTION 23.)**

The Contractor shall provide and maintain comprehensive general public liability insurance protecting the Contractor and the City against claims arising out of or resulting from the Contractor's operation under his contract for personal injury or property damage with minimum combined single limits of \$1,000,000, whether such operations are performed by himself, or by anyone directly or indirectly employed by them. In addition, a copy of the policy may be requested upon award. Certificates of insurance acceptable to the City shall be filed with the City prior to commencement of work and said certificate shall provide that policies will not be altered or canceled until at least 30 days prior written notice has been given to the City.



The Contractor shall indemnify and hold the OWNER, its officers and employees harmless from any suits, claims, demands, damages, liabilities, costs and expenses including reasonable attorney's fees, arising out of or resulting from the performance of the work. Certificates of Insurance are required naming the City as the Certificate Holder. The Certificates should reflect the insurance coverage required herein. The Certificates are to be signed by a person authorized by the Insurer to bind coverage on its behalf and must be an original signature. Certificates signed using digital signatures will not be accepted. The Certificates must indicate coverage will not be canceled or non-renewed except after thirty (30) days prior written notice to the City at the following address: City of Huntsville, P.O. Box 308, Huntsville, Alabama 35804, Attention: Penny Kelly.

#### 10. LICENSES AND CLASSIFICATIONS

In order to receive the award of this contract, the Contractor shall be required to possess a valid general contractor's license in accordance with Code of Alabama §§34-8-2 (1975) and (1996 amended) Code of Alabama as stated in Section 1 above. This general contractor's license shall be a State of Alabama general contractor's license and shall be maintained throughout the term of this contract. A valid City of Huntsville license shall also be maintained throughout the term of this contract.

#### 11. PERMITS

Additionally, the contractor shall be required to obtain and pay for all other federal, state or local permits, licenses, and fees which may be necessary or required in order to perform the work detailed herein. A City of Huntsville Contractor's License must be obtained from the City of Huntsville Inspection Department at the time signatures are obtained on contracts. A copy of City of Huntsville license shall be provided to the OWNER at the time the contract is executed.

#### 12. PAYMENT

The OWNER agrees to pay the contractor as follows: Once each month per project the OWNER shall make partial payment to the Contractor on the basis of duly certified and approved estimates of the work performed during the preceding month by the Contractor, less five (5%) of the amount of such estimate, which is to be retained by the City until all of the work has been performed. Owner reserves the right to withhold payments for, but not limited to: a) defective work not remedied or defective materials not removed from site; b) claims filed, or reasonable evidence indicating imminent filing of claims against the Contractor; c) failure of the Contractor to make payments properly to subcontractors or for material or labor; d) a reasonable doubt that the Contract can be completed for the balance then unpaid; e) damage to another Contractor; f) performance of work in violation of the terms of the Contract; g) expiration of Contract time. Liquidated damages will be deducted from all invoices when the invoice estimate period end date is later than the contract completion date. All pay requests will be submitted by hard copy and on disk. The hard copy will be printed from the disk. A sample copy of the invoice is attached as Attachment "F". The OWNER will provide the disk to the contractor. Two originals and two copies of the invoices are required before payment will be made. The disk should be submitted each month, along with the originals and copies, to the Administrative Officer in the Engineering Department. No further retainage will be held after fifty percent of the contract is complete. All payments to contractor will be made as soon as practical after the approval and finance processes have been completed. SEE SECTION 32 FOR INFORMATION ON FINAL PAYMENT.

#### 13. N/A

#### 14. EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, and SITE WORK

Before submitting a proposal, bidders shall examine carefully the site of the proposed work, the general and local conditions, the proposal form, standard specifications, supplemental specifications, special provisions, and the bid bond form, and it is mutually agreed that the submission of a proposal shall be prima facie evidence that the bidder has made such examination and has judged for and satisfied himself as to the conditions to be encountered in performing the work, and to the requirements of plans, standard specifications, supplemental specifications, special provisions, contract, and bonds. No adjustments or compensation will be allowed for losses caused by failure to comply with this requirement. Boring logs and other records of subsurface investigations may be available for inspection by bidders. Bidders shall request such records if they are not otherwise provided with bid documents. If available, it is understood that such information was obtained and is intended for the City of Huntsville's design and estimating purposes only. It is made available to bidders that they may have access to identical subsurface information available to the City, and is not intended as a substitute for personal investigation, interpretations and judgment of the bidders. Bidders are advised that the City disclaims responsibility for any opinions, conclusions, interpretations, or deductions that may be expressed or implied in any of the information presented or made available to bidders; it being expressly understood that the making of deductions, interpretations, and conclusions from all of the accessible factual information is the bidder's sole responsibility.

The Contractor shall have a continuing duty to read, carefully study and compare each of the Contract Documents, the Shop Drawings, and the Product Data and shall give written notice to the Owner of any inconsistency, ambiguity, or error omission which the Contractor may discover with respect to these documents before proceeding with the affected work. The issuance or the express or implied approval by the Owner or the Engineer of the Contract Documents, Shop Drawings, or Product Data shall not relieve the Contractor of the continuing duties imposed hereby, nor shall any such approval be evidence of the Contractor's compliance with this Contract. The Owner has requested the Engineer to only prepare documents for the Project,

including drawings and specs for the project which are accurate, adequate, consistent, coordinated and sufficient for construction. HOWEVER, the OWNER MAKES NO REPRESENTATION OR WARRANTY OF ANY NATURE WHATSOEVER TO THE CONTRACTOR CONCERNING SUCH DOCUMENTS. By the execution hereof, the contractor acknowledges and represents that it has received, reviewed, and carefully examined such documents, has found them to be complete, accurate, adequate, consistent, coordinated and sufficient for construction, and that the Contractor has not, does not, and will not, rely upon any representation or warranties by the Owner concerning such documents as no such representation or warranties have been or are hereby made.

#### 15. INCLUSIONS TO CONTRACT

The parties further agree that the advertisement for bids, instructions to bidders, contractor's proposal, plans and specifications, general requirements, supplement to general requirements and general terms and conditions together with any addenda thereto made prior to submission of the contractor's proposal and all modifications agreed to by the parties and issued after the execution of this contract are a part of this contract as if fully set out herein.

#### 16. COMMENCEMENT OF WORK

It is further understood and agreed that the Contractor shall commence work to be performed under this contract within fifteen (15) days from the date of this contract, unless otherwise instructed in writing by the OWNER. All work shall be carried on continuously to completion.

#### 17. CONTRACT TIME

All work is to be completed within the allotted time of the original contract, which is stated in the bid proposal documents, unless a valid change order has been issued which alters the contract time period.

#### 18. LIQUIDATED DAMAGES

It is further understood and agreed by and between the parties to this contract, that in the event the work to be performed under this contract is not completed at the expiration of the contract time, then, and in that event, the Contractor shall pay to the City the amounts per calendar day by the schedule shown in the schedule in the City of Huntsville Standard Specifications, Section 80.11 - "Schedule of Liquidated Damages" for each day thereafter until such work is completed. The City will deduct said sum or sums from any money due the Contractor under this contract for any and all invoices submitted after the contract due date. (See Section 12.). Attachment "F" - Sample of Request for Payment with Liquidated Damages shall become a part of the contract documents. Liquidated damages will be deducted from all invoices when the invoice estimate period end date is later than the contract completion date.

**Section 80.11 - "Schedule of Liquidated Damages" has been amended as follows effective 2/1/11 and revised in COH specifications 3/7/11:**

| Original Contract Amount |                  | Liquidated Damages Daily Charge |          |
|--------------------------|------------------|---------------------------------|----------|
| More Than                | To and Including | Calendar Day or Fixed Date      | Work Day |
| \$ 0                     | \$ 100,000       | \$ 200                          | \$ 400   |
| \$ 100,000               | \$ 500,000       | \$ 550                          | \$ 1,100 |
| \$ 500,000               | \$ 1,000,000     | \$ 900                          | \$ 1,800 |
| \$ 1,000,000             | \$ 2,000,000     | \$ 1,350                        | \$ 2,700 |
| \$ 2,000,000             | .....            | \$ 1,550                        | \$ 3,100 |

When the contract time is on the calendar day or date basis, the schedule for calendar days shall be used. When the contract time is on a work day basis, the schedule for work days shall be used.

Amounts in accordance with ALDOT and COH specifications and is based on contract amount before Change Orders.

## 19. STORAGE OF MATERIALS

The Contractor shall not permit the storage of materials on or use of any property outside the right-of-way easement or property identified as the project site.

## 20. TRAFFIC FLOW

The Contractor shall be responsible for the uninterrupted, orderly and safe flow of traffic around, on, over or across the project site.

## 21. TERMINATION FOR CONVENIENCE

A. The City may for any reason whatever terminate performance under this Contract by the Contractor for convenience. The City shall give written notice of such termination to the Contractor specifying when the termination becomes effective.

B. The Contractor shall incur no further obligations in connection with the Work and the Contractor shall stop Work when such termination becomes effective. The Contractor shall also terminate outstanding orders and subcontracts. The Contractor shall settle the liabilities and claims arising out of their termination of subcontracts and orders. The City may direct the Contractor to assign the contractor's right, title and interest under terminated orders or subcontracts to the City or its designee.

C. The Contractor shall transfer title and deliver to the Owner such completed Work and materials, equipment, parts, fixtures, information and Contract rights as the Contractor has.

D. (1) The Contractor shall submit a termination claim to the City specifying the amounts due because of the termination for convenience together with costs, pricing or other data required by the City. If the Contractor fails to file a termination claim within six (6) months from the effective date of termination, the owner shall pay the Contractor, an amount derived in accordance with subparagraph (3) below.

(2) The City and the contractor may agree to the compensation, if any, due to the Contractor hereunder.

(3) Absent agreement to the amount due to the Contractor, the City shall pay the Contractor the following amounts:

(a) Contract prices for labor, materials, equipment and other services accepted under this Contract.

(b) Reasonable costs incurred in preparing to perform and in performing the terminated portion of the Work, and in terminating the Contractor's performance, plus a fair and reasonable allowance for overhead and profit thereon (such profit shall not include anticipated profit or consequential damages); provided, however, that if it appears that the Contractor would not have profited or would have sustained a loss if the entire Contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss, if any. Costs incurred in performing the terminated portion of the work must have been incurred prior to the effective date of the termination.

(c) Reasonable costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to Paragraph B of this clause. These costs shall not include amounts paid in accordance with other provisions hereof.

The Total sum to be paid the Contractor under this clause shall not exceed the total Contract Price, as properly adjusted, reduced by the amount of payments otherwise made, and shall in no event include duplication of payment.

## 22. TERMINATION FOR CAUSE

- A. If the Contractor persistently or repeatedly refuses or fails to prosecute the work in a timely manner, supply enough properly skilled workers, supervisory personnel or proper equipment or material, or if it fails to make prompt payment to Subcontractors or for materials or labor, or persistently disregards laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, or otherwise is guilty of a substantial violation of a material provision of this Contract, then the Owner may by written notice to the Contractor, without prejudice to any other right or remedy, terminate the employment of the Contractor and take possession of the site and of all materials, equipment, tools, construction equipment, and machinery thereon owned by the Contractor and may finish the Work by whatever methods it may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished.
- B. If the unpaid balance of the Contract Price exceeds the cost of finishing the work, including compensation for the additional professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the City. This obligation for payment shall survive the termination of the Contract.



- C. In the event the employment of the Contractor is terminated by the City for cause pursuant to Paragraph A and it is subsequently determined by a court of competent jurisdiction that such termination was without cause, such termination shall thereupon be deemed a Termination for Convenience and the provisions of the Termination for Convenience clause shall apply.

## 23. UNBALANCED BIDS

The City may reject a bid as nonresponsive if the prices bid are materially unbalanced between line items. A bid is materially unbalanced when it is based on prices which are significantly overstated or understated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the City even though it may be the low evaluated bid.

## 24. ADDITIONAL INSURANCE REQUIREMENTS

The Contractor shall carry insurance of the following kinds and amounts in addition to any other forms of insurance or bonds required under the terms of the contract specifications. The Contractor shall procure and maintain for the duration of the job until final acceptance by the Owner, or as later indicated, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

### A. MINIMUM SCOPE OF INSURANCE

#### 1. General Liability

Insurance will be written on an occurrence basis. Claims-made coverage will be accepted only on an exception basis after the Owner's approval. General Liability Coverage and Owners Contractors Protective Insurance should be written by this same insurance company.

Commercial General Liability

Products and Completed Operations

Contractual

Personal Injury

Explosion, Collapse and Underground

Broad Form Property Damage

#### 2. Professional Liability

N/A

#### 3. Automobile Liability

Business Automobile Liability providing coverage for all owned, hired and non-owned autos. Coverage for loading and unloading shall be provided under either automobile liability or general liability policy forms.

#### 4. Worker's Compensation Insurance

Statutory protection against bodily injury, sickness or disease or death sustained by employee in the scope of employment. Protection shall be provided by a commercial insurance company or a recognized self-insurance fund authorized before the State of Alabama Industrial Board of Relations.

#### 5. Employers Liability Insurance

Covering common law claims of injured employees made in lieu of or in addition to a worker's compensation claim.

### B. MINIMUM LIMITS OF INSURANCE

#### 1. General Liability

Commercial General Liability on an occurrence form for bodily injury and property damage:

|             |                                           |
|-------------|-------------------------------------------|
| \$2,000,000 | General Aggregate Limit                   |
| \$2,000,000 | Products - Completed Operations Aggregate |
| \$1,000,000 | Personal and Advertising Injury           |
| \$1,000,000 | Each Occurrence                           |

2. Professional Liability

N/A

3. Automobile Liability

\$1,000,000 Combined Single Limit per accident for bodily injury and property damage.

4. Worker's Compensation

As required by the State of Alabama Statute.

5. Employers Liability

\$100,000

Bodily Injury

\$500,000

Policy Limit by Disease

C. OTHER INSURANCE PROVISIONS

The Owner is hereby authorized to adjust the requirements set forth in this document in the event it is determined that such adjustment is in the Owner's best interest. If the insurance requirements are not adjusted by the Owner prior to the Owner's release of specifications with regard to the project in questions, then the minimum limits shall apply.

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages Only:

a. The Owner, its officers, employees, agents and specified volunteers are to be covered as Additional Insureds, as their interest may appear, as respects: liability arising out of activities performed by or on behalf of the contractor, architect, engineer, land surveyor or consulting firm for products used by and completed operations of the Contractor, or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Owner, its officers, employees, agents or specified volunteers.

b. The Contractor's insurance coverage shall be primary insurance as respects the Owner, its officers, employees, agents, and specified volunteers, as their interest may appear. Any insurance or self-insurance maintained by the Owner, its officers, officials, employees, agents or specified volunteers shall be excess of the Contractor's insurance and shall not contribute to it.

c. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

2. All Coverages

a. The Contractor is responsible to pay all deductibles. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Owner. Cancellation of coverage for non-payment of premium will require ten (10) day's written notice to the Owner.

b. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Owner, its officers, employees, agents or specified volunteers.

D. ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with an A. M. Best's rating of no less than B + V.

E. VERIFICATION OF COVERAGE

The Owner shall be indicated as a Certificate Holder and the Contractor shall furnish the Owner with Certificates of Insurance reflecting the coverage required by this document. The A.M. Best Rating and deductibles, if applicable, shall be indicated on the Certificate of Insurance for each insurance policy. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates are to be received and approved by the Owner before work commences. The Owner reserves the right to require complete, certified copies of all required insurance policies at any time.

F. SUBCONTRACTOR WORKING FOR GENERAL CONTRACTOR, OR ARCHITECT, ENGINEERS, LAND SURVEYORS OR CONSULTING FIRMS WORKING FOR THE ENGINEER OF RECORD

The Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and/or endorsements for each subcontractor. The Engineer of Record shall include all architects, engineers, land surveyors or consulting firms as insured under its policies other than professional liability, or shall furnish separate certificates and/or endorsements for each architect, engineer, land surveyor or consulting firm. Subcontractors working for the contractor or architects, engineers, land surveyors, or consulting firms working for the Engineer of Record shall be required to carry insurance.

#### G. HOLD HARMLESS AGREEMENT

##### 1. Other Than Professional Liability Exposures

The Contractor, architect, engineer, land surveyor or consulting firm, to the fullest extent permitted by law, shall indemnify and hold harmless the City of Huntsville, its elected and appointed officials, employees, agents and specified volunteers against all claims, damages, losses and expenses, including, but not limited to, attorney's fees, arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to personal injury, including bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including loss of use resulting therefrom and (2) is caused by any negligent act or omission of the contractor, architect, engineer, land surveyor or consulting firm, or any of their subcontractors, subconsultants, or anyone directly or indirectly employed by any of them or anyone for whose acts they are legally liable. Such obligation should not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

2. The architect, engineer, land surveyor or consulting firm agrees that as respects to negligent acts, errors, or omissions in the performance of professional services, to indemnify and hold harmless the City of Huntsville, its officers, agents, employees, and specified volunteers from and against any and all claims, demands, losses and expenses including, but not limited to attorney's fees, liability, or consequential damages of any kind or nature resulting from any such negligent acts, errors, or omissions of the architect, engineer, land surveyor or consulting firm or any of their subconsultants, or anyone directly or indirectly employed by any of them or anyone for whose acts they are legally liable.

#### 25. DOMESTIC PREFERENCES

In the performance of this contract, the contractor shall comply with Ala Code (1975) §§ 39-3-1 through 39-3-5 in supplying steel, materials, supplies, other products, and labor. Failure to comply with these requirements shall subject the contractor to the penalties set forth in the sections of the Alabama Code set forth above.

#### 26. TIME IS OF THE ESSENCE

Time is of the essence in the performance of this contract.

#### 27. NO DAMAGES FOR DELAYS

In the event that the Contractor is delayed in the performance of the work for the reasons set forth in 80.09 of the City of Huntsville's Standard Specifications for the construction of Public Improvements, Contract Projects, 1991, then the Contractor's recovery for such delay shall be limited to the extensions of time in contract performance in accordance with the provisions of §80.09 and in §4(c) "Changes in Contract Time" as set forth in the Request for Bids.

In such circumstances, time extensions are the sole remedy provided to the Contractor. The Contractor shall make no claim for extra compensation due to delays of the project beyond his control. Such delays may include those caused by an act of neglect on the part of the owner or the engineer, or by an employee of either, or by any separate contractor employed by the Owner, or by any changes ordered in the work, or by labor disputes, fire, unusual delays in transportation, adverse weather condition not reasonably anticipatable, unavoidable casualties, or by delay specifically authorized by the owner in writing pending the resolution of any disputes, or by any other cause which the Owner determines may justify delay.

#### 28. CONTRACTOR RESPONSIBLE FOR LOCATING UTILITIES PRIOR TO CONSTRUCTION INITIATION

The Contractor's attention is specifically directed to §50.07 -Cooperation with Utilities and Non-Highway Public Facilities of the City of Huntsville's Standard Specifications for the Construction of Public Improvements, Contract Projects, 1991. In addition to the responsibilities placed on the Contractor by that clause, the Contractor shall be responsible for having existing utilities located prior to excavations. The existence and location of any underground utility pipes or structures shown on these drawings have been obtained by a search of the available records. The City assumes no responsibility as to completeness or accuracy of the depicted location on these drawings. The Contractor shall be responsible for taking precautionary measures to protect the utility lines shown and all other lines not of record or not shown on these drawings by verification of their location in the field prior to the initiation of the work.

#### 29. CORRECTION TO CITY OF HUNTSVILLE'S STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF PUBLIC IMPROVEMENTS, CONTRACT PROJECTS, 1991

§80.09 (b) 2.of the City of Huntsville's Standard Specifications for the construction of Public Improvements, Contract Projects,

1991 refers to the definition of recovery time as being set forth in Section 10.01. Inasmuch as this definition was omitted from §10.01, the following definition shall be incorporated :

**Recovery Time.** Recovery time is defined as the time required, after the controlling item or items of work have been substantially damaged as a result of conditions and causes beyond the control of the Contractor and not due to his negligence of fault, to restore the work to the condition existing prior to such damage so that normal operations can be resumed on the contract pay items. Recovery time shall be the number of days required by the Contractor, working with normal forces, to restore the work as described above.

### 30. WARRANTIES

Contractor shall provide a minimum of one year warranty of all materials and services from date of final completion. Additionally, all manufacturer's warranties on materials used in providing the services shall be provided to the owner with the final payment request. Separate warranty bonds may be required on specialty items as determined by the Owner and will be shown as a separate line item in the quantities prior to bidding.

### 31. COORDINATION WITH OTHER CONTRACTORS

It shall be the responsibility of the contractor to coordinate with other separate contractor's who may be working on the site or an adjacent site with regards to access to the site, storage of materials and working on a non-interference basis.

### 32. W-9 TAXPAYER FORM

All vendors/contractors are required to submit a Federal Tax Form W-9 to City of Huntsville at the time a contract is awarded, unless vendor/contractor is already registered and doing business with the City. No payments of invoices can be made until this W-9 Tax Form has been properly submitted. A copy of the W-9 Tax Form can be obtained at the following website: [www.irs.ustreas.gov/pub/irs-pdf/fw9.pdf](http://www.irs.ustreas.gov/pub/irs-pdf/fw9.pdf)

### 33. FINAL PAYMENT

Final payment to construction contractor will be made after contractor provides the following: advertising of completion for four (4) consecutive weeks, lien waivers have been provided from all subcontractors, Record Drawings (As-Builts) have been submitted to the OWNER by construction contractor, all property pins have been reset by a licensed land surveyor hired by the construction contractor to meet "Standards of Practice for Surveying in the State of Alabama" as required by the Alabama Board of Registration for Engineering and Land Surveyors, and all construction signs have been removed. This final payment will be retainage only. All work shall be complete prior to advertisement of completion. Advertisement of completion shall be in a Huntsville local newspaper. The final payment request of retainage only shall be submitted along with two (2) original, certified copies (with raised notary seal) of the advertisement of completion, warranties, lien waivers and Record Drawings. The advertisement of completion must read as follows:

#### LEGAL NOTICE (Header)

\_\_\_\_\_(company name)\_\_\_\_\_ hereby gives Legal Notice of Completion of Contract with \_\_\_\_\_(project name)\_\_\_\_\_, \_\_\_\_\_(project no.(s))\_\_\_\_\_ located in the City of Huntsville, Alabama. All claims should be filed at \_\_\_\_\_(company address)\_\_\_\_\_ during this period of advertisement, i.e. June 17, 24, July 1, 8, 2011 (example of dates).

### 34. PROJECT COMPLETION DATE

The project completion date will be a date mutually agreed upon by the OWNER and Contractor. This date will be after all items have been completed. Therefore, all work will be complete before any advertisement of completion is made. The completion date will always be before the first advertisement date. This final project completion date will be the date used to determine the one year warranty for all work and materials, unless a separate warranty bond has been called for as a line item prior to bidding.

### 35. RECORD DRAWINGS

#### POLICY FOR RECORD DRAWINGS

The purpose of this policy is to document procedures for the preparation and delivery of Record Drawings. Record Drawings shall include all changes in the plans, including those issued as Change Orders, Plan Clarification, Addenda, Notice to Bidders, responses to Requests for Information, Jobsite Memos, and any additional details needed for the construction of the project, but not shown on the plans. After completion of all construction and before final acceptance is made, the Contractor shall submit one set of full size record drawings with dimensioned changes shown in red pencil, and one digital copy of record drawings using the criteria listed below.

**City Construction Projects:**

The Contractor shall be responsible for field surveying upon substantial completion of construction (to be performed by a registered land surveyor in Alabama). Contractor is responsible for providing digital record drawings showing all info specified below, as applicable. Record drawings shall be maintained by the Contractor at the work site and shall be updated based on job progress to reflect all changes. Record drawings shall be made available for review on a monthly basis at the job site. A monthly review of record drawings will be part of the monthly monetary progress review. Progress payments may be withheld if the Record Drawings are not kept up-to-date. A late review could result in a delay of payment.

**Format Requirements for all record drawing submittals:**

All drawings shall be prepared in Micro Station .DGN format, unless otherwise approved by the City Engineer. Transmittal letters shall consist of a list of files being submitted, a description of the data in each file, and a level/layer schematic of each design file. DGN design files should have working units as follows: master units in feet, no sub-units, and 1,000 positional units. All data submitted shall use NAD 1983 Alabama East Zone coordinates as described in The Code of Alabama (1975), section 35-2-1 and NGVD 1929. Digital files shall be submitted on 4-3/4" CD ROM, 100 MB zip drive, 3 and 1/2 inch floppy disk, or to the City of Huntsville F.T. P. Site. Contractor is required to certify that record drawings are in the correct format upon submittal. Record Drawings shall be prepared and provided to the OWNER in the manner required and described below in Level Symbolology.

**Record Drawing Criteria, unless otherwise noted by City Engineer:**

**1. Roadways:**

- a. Any changes during construction of roadway/intersections that differ from plan drawings.

**2. Sanitary Sewers:**

a. Gravity Line

- i. Horizontal Location of Manholes – Northing and easting Coordinates
- ii. Vertical Location of Manholes – Lid elevation and Invert elevation.
- iii. Changes in location of clean outs, or end of service lateral.
- iv. Changes in length, slope, size, or material of lines.

b. Force Mains

- i. Horizontal Location of Air Relief/Vacuum/Isolation Valves – Northing and easting Coordinates
- ii. Horizontal and Vertical Location of Fittings/Bends
- iii. Changes in length, size, depth or material of lines
- iv. Changes in restraint types

c. Pump Stations

- i. Changes in Structural Requirements – (length, width, thickness, cover, laps, bar size, spacing, materials, material strengths, etc.)
- ii. Changes in Site Development and/or Landscaping
- iii. Changes in Equipment

**3. Storm Drainage:**

a. Structures (boxes, inlets, end treatments, etc.):

- i. Horizontal locations of Features – Northing and easting coordinates
- ii. Vertical location of Features – Tops and Inverts
- iii. Changes in type, size, or material of feature.

b. Pipes / Culverts:

- i. Document length
- ii. Document slope
- iii. Document size
- iv. Document invert elevation
- v. Changes in material of structure

c. Flumes, Ditches, and/or Swales/Berms: (the following are minimum requirements).

- i. Horizontal location (to verify location within described easements)

|                                        |                                                        |
|----------------------------------------|--------------------------------------------------------|
| For easement widths less than 15- feet | At 100-foot intervals along the centerline of feature. |
| For easement widths 15-feet or Greater | At 200-foot intervals along the centerline of feature. |

- ii. Vertical location (to verify positive drainage)

|                            |                                                        |
|----------------------------|--------------------------------------------------------|
| For slopes less than 0.5%  | At 50-foot intervals along the centerline of feature.  |
| For slopes 0.5% or greater | At 100-foot intervals along the centerline of feature. |



- iii. Changes in width or material of feature.
- iv. Changes in location and type of geotechnical fabric used.
- v. Changes in overall grading of site topography.

d. Detention / Retention Facility:

- i. Changes in size, location, or material of facility.
- ii. Changes in location and type of geotechnical fabric used.
- iii. Where applicable, copy of maintenance agreement.

**Checklist for review of record drawings:**

- a. Changes in sidewalk location or size.
- b. Changes in shoulder widths.
- c. Changes in grades at intersections. (also to include changes in island location)
- d. Changes in location of driveway aprons.
- e. Changes in pavement section, to be supported by adequate documentation.
- f. Changes in gutter flow line elevation. (could be substituted in 3b) versus edge of pavement).
- g. Geotechnical fabric locations, to include vertical elevation.
- h. Changes in Traffic Engineering related items such as signals, signage and markings, etc.

Any other changes that may have occurred during construction.

**LEVEL SYMBOLOGY**

| DESIGN LEVEL | CONTENTS                                               | LINE CODE | COLOR | WEIGHT | TEXT SIZE | FONT | CELL NAME |
|--------------|--------------------------------------------------------|-----------|-------|--------|-----------|------|-----------|
| 1            | State Plane Coordinate Grid                            | 0         | 0     | 0      | 20        | 0    |           |
| 2            | Benchmarks                                             | 0         | 0     | 0      |           |      |           |
| 3            | Street Text                                            | 0         | 3     | 0      | 20        | 0    |           |
| 4            | Street R/W                                             | 7         | 0     | 0      |           |      |           |
| 5            | Street Centerline                                      | 7         | 0     | 0      |           |      |           |
| 6            | Street Pavement                                        | 0         | 3     | 0      |           |      |           |
| 6            | Proposed Street Pavement                               | 3         | 16    | 0      |           |      |           |
| 7            | Parking Lots                                           | 1         | 3     | 1      |           |      |           |
| 8            | Secondary Roads                                        | 2         | 3     | 0      |           |      |           |
| 8            | Trails                                                 | 3         | 3     | 0      |           |      |           |
| 9            | Secondary Roads/Trails Text                            | 0         | 3     | 0      | 20        | 0    |           |
| 10           | Sidewalks                                              | 5         | 3     | 0      |           |      |           |
| 11           | Bridges/Culverts                                       | 0         | 0     | 0      |           |      |           |
| 12           | Hydrology - Major                                      | 6         | 1     | 0      |           |      |           |
| 12           | Hydrology - Minor, Ditches                             | 7         | 1     | 0      |           |      |           |
| 13           | Hydrology - Text                                       | 0         | 1     | 0      | 25        | 23   |           |
| 14           | Tailings & Quarries, Athletic Fields/Text, misc. areas | 0         | 1     | 0      |           |      |           |
| 15           | City Limits/County Line                                | 1         | 0     | 3      |           |      |           |
| 16           | City /limit text                                       | 0         | 0     | 1      | 30        | 0    |           |
| 17           | Railroad Tracks (Patterned)                            | 0         | 2     | 0      |           |      | RR        |
| 18           | Railroad Text                                          | 0         | 2     | 0      | 25        | 0    |           |
| 19           | Railroad R/W                                           | 2         | 2     | 0      |           |      |           |
| 20           | Utility Poles (Cell)                                   | 0         | 5     | 0      |           |      | P POLE    |
| 21           | Utility Easements                                      | 3         | 5     | 0      |           |      |           |
| 22           | Utility Text                                           | 0         | 5     | 1      |           |      |           |
| 23           | Geographic Names                                       | 0         | 3     | 1      |           |      |           |
| 24           | Building Structures                                    | 0         | 0     | 0      |           |      |           |
|              | Pools and Text                                         | 0         | 1     | 0      | 10        | 1    |           |
| 24           | Future Site of Structures                              | 2         | 0     | 0      |           |      | STRUCT    |
|              | Existing Structures (exact location and shape unknown) | 2         | 0     | 0      |           |      | STRCEX    |

|    |                                  |   |     |   |       |   |                  |
|----|----------------------------------|---|-----|---|-------|---|------------------|
| 25 | Property Lines                   | 6 | 6   | 1 |       |   |                  |
| 26 | Cadastral Polygons               | 6 | 6   | 0 |       |   |                  |
| 27 | Ownership Text                   | 0 | 6   | 1 |       |   |                  |
| 28 | Cemeteries/Text                  | 4 | 6   | 0 | 10    | 1 |                  |
| 29 | Lot Numbers                      |   |     |   | 25    | 0 |                  |
| 30 | Block Numbers                    |   |     |   | 30    | 0 |                  |
| 31 | Addition Names                   | 0 | 0   | 0 | 35    | 0 |                  |
| 32 | Open                             |   |     |   |       |   |                  |
| 33 | Lot Ticks                        |   |     |   |       |   |                  |
| 34 | Lot Lines/Property Lines         | 6 | 6   | 0 |       |   |                  |
| 35 | Trees/Hedge Rows                 | 0 | 6   | 0 | AS=1  |   | TREES            |
| 36 | GPS Monuments                    | 0 | 5   | 0 | 15    | 0 | GPS              |
| 37 | 2' Topo Contour                  |   |     |   |       |   |                  |
| 38 | 5' Topo Contour                  | 0 | 7   | 0 |       |   |                  |
| 39 | 25' Major Topo Contour           | 0 | 7   | 0 |       |   |                  |
| 40 | X Spot Elevation                 | 0 | 7   | 0 |       |   |                  |
| 41 | FEMA Monuments/Labels            | 0 | 3/0 | 0 | 18    | 1 | GPSPNT           |
| 42 | Quarter Sections                 |   |     |   |       |   |                  |
| 43 | Section Lines                    | 0 | 5   | 0 |       |   |                  |
| 44 | Features                         | 0 | 2   | 0 |       |   |                  |
| 44 | Cell Towers                      | 0 | 12  | 0 | AS=1  |   | CELTWR           |
| 45 | Fences (Pattern)                 | 0 | 8   | 0 | AS=1  |   | FENCE            |
| 46 | Format/Legend                    | 0 | 0   | 0 |       |   | Limleg<br>Madleg |
| 47 | Mass Points                      | 0 | 7   | 2 |       |   |                  |
| 48 | Break Lines                      | 0 | 7   | 2 |       |   |                  |
| 49 | Open                             |   |     |   |       |   |                  |
| 50 | Signs                            |   |     |   |       |   |                  |
| 51 | Open                             |   |     |   |       |   |                  |
| 52 | Open                             |   |     |   |       |   |                  |
| 53 | Open                             |   |     |   |       |   |                  |
| 54 | Open                             |   |     |   |       |   |                  |
| 55 | Open                             |   |     |   |       |   |                  |
| 56 | Property Address                 | 0 | 1   | 0 |       |   |                  |
| 57 | Text Tag for Buildings           | 0 | 1   | 0 | 10-20 | 1 |                  |
| 58 | Open                             |   |     |   |       |   |                  |
| 59 | Open                             |   |     |   |       |   |                  |
| 60 | Open                             |   |     |   |       |   |                  |
| 61 | Open                             |   |     |   |       |   |                  |
| 62 | Monuments for Setup (point cell) |   |     |   |       |   |                  |
| 63 | Open                             |   |     |   |       |   |                  |

**36. LIEN WAIVERS**

Lien waivers will be required from all subcontractors working for the contractor. These lien waivers shall be included with your final payment package. The contractor is responsible for obtaining signatures from his subcontractors. If no subcontractors are used, contractor must provide a statement indicating such.

**37. LOWEST RESPONSIBLE BIDDER**

For the purpose of determining the lowest responsible bidder, the OWNER shall consider the base bid amount together with any options set forth in the Request for Bids. In the event that the City does not have sufficient funds to award both the base bid and all options, then the City reserves the right to determine the lowest responsible bidder on the base bid only or the base bid and the number of options affordable considering the funds available to the City for the procurement. This method for determining the low bidder is for the purpose of allowing the City to procure the most advantageous bid for the OWNER. City of Huntsville reserves the right to award any and/or all options at any time during the life of the contract.

**38. NON-RESIDENT BIDDERS**

"In awarding the Contract, preference will be given to Alabama resident contractors and a nonresident bidder domiciled in a state having laws granting preference to local contractors shall be awarded the Contract only on the same basis as the nonresident bidder's state awards contracts to Alabama contractors bidding under similar circumstances."



39. CORRECTION TO SECTION 80.08(C) of The City of Huntsville "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC IMPROVEMENTS" is revised as shown:

(C) DAYS WORK NOT PERMITTED: The Contractor shall not permit work on any pay item to be done on Sundays and the following holidays: New Year's Day, Martin Luther King's Birthday as nationally observed, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and Christmas Day, except with permission of the Director.

40. CORRECTION TO SECTION 80 – PROSECUTION AND PROGRESS 80.01 Subletting and Contract. (a) LIMITATIONS

The Contractor shall not sublet the contract or any portion thereof, or of his right, title, or interest therein, without written consent of the DIRECTOR. If such consent is given, the Contractor will be permitted to sublet a portion of the work, but shall perform with his own organization, work amounting to not less than 30 percent of the total contract cost. Any items designated in the contract as "specialty items" may be performed by sub-contract and the cost of such specialty items performed by sub-contract may be deducted from the total cost before computing the amount of work required to be performed by the contractor with his own organization. No sub-contracts, or transfer of contract, shall relieve the Contractor of his liability under the contract and bonds. The Department reserves the right to disapprove a request for permission to sublet when the proposed Subcontractor has been disqualified from bidding for those reasons listed in Subarticle 20.02(b) and Article 30.03.

41. CORRECTION TO SECTION 80 – PROSECUTION AND PROGRESS 80.03 Progress Schedule of Operations

A critical path schedule is required within thirty (30) days after award. The critical path schedule must be submitted in Microsoft Projects format (electronic format and hard copy), with the critical path highlighted. The critical path schedule shall show information on the task or tasks that must be finished on schedule for the project to finish on schedule. Task dependencies, constraints, and relationships shall be shown on the schedule. If the progress report (critical path) is not received, YOUR first pay estimate will NOT BE PROCESSED UNTIL IT IS RECEIVED. See section 80.03 and 80.04 for additional requirements.

42. CORRECTION TO SECTION 80 – PROSECUTION AND PROGRESS 80.09 (b) Contracts on a Calendar Day or Calendar Date Basis

§80.09 (b) first paragraph reads: "When the notice to proceed is delayed more than 10 calendar days after execution of the contract, the date of completion will be extended . . ." Shall be amended to read "When the notice to proceed is delayed more than 15 calendar days after execution of the contract, the date of completion will be extended . . ."

Section 80.09(B) is revised to remove the last sentence of the first paragraph: ( "Also where the total cost of the completed work exceeds the total cost shown on the proposal, an extension in calendar days will be granted the Contractor, as provided in Section 80.09(a)1." ) It is replaced by: "Where the scope of work is increased, an extension of time commensurate with the scope of the change may be granted by the OWNER when in his judgment, the facts justify an extension. The contractor shall provide justification substantiated to the satisfaction of the OWNER with any requests for time extensions. Justification shall include, but not be limited to, a revised schedule showing the impact to critical path tasks."

43. CORRECTION TO SECTION 105 – EXCAVATION AND EMBANKMENT 105.04 (a) Method of Measurement

Section 105.04 will remain as stated when estimated borrow material is less than 2500 C.Y.

When estimated borrow material is more than 2500 C.Y., Section 105.04 is revised to remove the last paragraph: "Borrow material will be measured at the point of delivery, inside the delivery truck less 30 percent for shrinkage."

44. CORRECTION TO SECTION 847 – PIPE CULVERT JOINT SEALERS

Section 847 is deleted and replaced with Section 846 – Pipe Culvert Joint Sealers, ALDOT Specifications for Highway Construction, Current Edition.

45. NPDES CONSTRUCTION REQUIREMENTS

For areas of this project meeting the Alabama Department Of Environmental Management (ADEM) definition of a "Construction Site", the Contractor shall prepare and apply for, pay the necessary fees, post the required registration at the jobsite prior to commencing work, and maintain the worksite and records in accordance with the ADEM requirements for National Pollutant Discharge Elimination System (NPDES) registration. Off site borrow pits utilized in the construction of this project are included in the requirement. NPDES Construction Site is construction that disturbs 1 acre or greater or will disturb less than 1 acre but is part of a larger common plan of development or sale whose total land disturbing activities total 1 acre or greater. An NPDES construction site also includes construction sites, irrespective of size, whose stormwater discharges have a reasonable potential to be a significant contributor of pollutants to a water of the State, or whose stormwater discharges have a reasonable potential to cause or contribute to a violation of an applicable Alabama water quality standard as determined by the Department. The Contractor is referred to the "Alabama Department Of Environmental Management Field Operations Division – Water Quality Program - Division 335 – 6" for complete definitions and requirements. The Contractor is

also referred to Item 11 of these General Requirements, sections 50.15, 50.16, and 70.02 of the City of Huntsville "Standard Specifications For Construction Of Public Improvements, Contract Projects" (Specifications)

Contractor violations of the permit by rule which results in enforcement actions from ADEM including fines and/or work stoppage shall be the responsibility of the Contractor. Fines assessed to the Contractor or the OWNER because of Contractor action shall be paid by the Contractor. No extension of contract time shall be considered as a result of enforcement. Enforcement history will also be considered by the OWNER in its decision to issue future proposals or award future contracts in accordance with disqualification provisions of Section 20.02(b) of the Specifications.

**46. DELETION OF SECTION 50.01 – Authority of the Engineer of Record**  
This section is deleted.

**47. SHOP DRAWINGS**

The approval of shop drawings by the Engineer will cover only the features of the design and in no case shall this approval be considered to cover error or omissions in shop details or a check of any dimensions. The Contractor shall be responsible for the accuracy of the shop drawings, the fabrication of materials and the fit of all connections; and he shall bear the cost of all extra work in erection caused by errors in shop drawings or in fabrication, inaccurate workmanship, misfits of connections or for any changes in fabrication necessary. No work shall be done on the material before the shop drawings have been approved. Any material that the Contractor orders prior to the approval shall be at the Contractor's risk.

Substitutions or changes whether indicated or implied on shop drawings will not be considered as changes regardless of the Engineer's approval of shop drawings unless the change has been previously submitted and approved as a change order per the requirements for changes in the contract.

After a shop drawing has been approved, no changes shall be made unless directed in writing to the Owner and acceptance by the Owner of said changes. Any acceptance of change by the Owner does not constitute a change to the contract unless that change has been approved and directed in writing per change order. Compensation for preparing and furnishing all shop and working drawings shall be included in the contract unit prices for the various pay items of work.

**48. E-VERIFY NOTICE**

The Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, *Code of Alabama (1975) § 31-13-1 through 31-13-30* (also known as and hereinafter referred to as "the Alabama Immigration Act") is applicable to contracts with the City of Huntsville. As a condition for the award of a contract and as a term and condition of the contract with the City of Huntsville, in accordance with § 31-13-9 (a) of the Alabama Immigration Act, any business entity or employer that employs one or more employees shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien and shall attest to such by sworn affidavit signed before a notary. Such business entity or employer shall provide a copy of such affidavit to the City of Huntsville as part of its bid or proposal for the contract along with a copy of the Memorandum of Understanding as documentation establishing that the business entity or employer is enrolled in the E-Verify program. The required affidavit form for the contractor and for subcontractors are included as Attachment "J" in these specifications.

During the performance of the contract, such business entity or employer shall participate in the E-Verify program and shall verify every employee that is required to be verified according to the applicable federal rules and regulations. The business entity or employer shall assure that these requirements are required of every subcontractor in accordance with §31-13-9(c) and shall maintain records that are available upon request by the City, state authorities or law enforcement to verify compliance with the requirements of the Alabama Immigration Act. Failure to comply with these requirements may result in breach of contract, termination of the contract or subcontract, and possibly suspension or revocation of business licenses and permits in accordance with §31-13-9 (e) (1) & (2) or in the case of a subcontractor, in accordance with §31-13-9 (f) (1) & (2).

**49. CITY OF HUNTSVILLE'S TRAFFIC ENGINEERING DEPARTMENT CONSTRUCTION REQUIREMENTS**

For areas of this project that require removal of traffic loops, striping, markings, rpm's and ceramic markers, the following shall apply:

- 1. TRAFFIC SIGNAL LOOP REPAIRS** – All vehicular and bicycle detector loop replacements shall be in accordance with the Alabama Department of Transportation Standard Specifications for Highway Construction, current edition. Unless otherwise specified, traffic signal loops shall be replaced exactly as existed prior to any paving or resurfacing work. The general contractor will be responsible for documenting location of loops, location of any associated items for loop operation and assuring that loops are replaced exactly as existed prior to paving. All vehicular and bicycle loop repairs shall be replaced within fourteen (14) calendar days after paving work.
- 2. TRAFFIC SIGNAL STRIPING, MARKINGS, RAISED PAVEMENT MARKERS AND CERAMIC MARKERS FOR GUIDANCE** - All traffic striping, markings, raised pavement markers and ceramic markers for guidance shall be in accordance with the Alabama Department of Transportation Standard Specifications for Highway Construction, current edition. Unless otherwise specified, traffic striping, markings, raised pavement markers and ceramic markers

for guidance shall be replaced exactly as traffic striping, markings, raised pavement markers and ceramic markers for guidance existed prior to any paving or resurfacing work. The general contractor will be responsible for documenting location of all striping, markings, raised pavement markers and ceramic markers for guidance and assuring that all are replaced exactly as existed prior to paving. All traffic striping, markings, raised pavement markers and ceramic markers for guidance shall be reflectorized. All resurfaced areas shall be marked with temporary striping and markings for traffic usage by nightfall each day, 7 days a week, in accordance with State of Alabama regulations. All permanent striping, markings, raised pavement markers and ceramic markers for guidance shall be replaced within thirty (30) calendar days after paving work.

#### 50. SURVIVABILITY OF CONTRACT PROVISIONS

Termination of this Contract by either party shall not affect the rights and obligations of the parties that accrued prior to the effective date of the termination. Terms and conditions of the contract that survive termination include, but are not necessarily limited to, provisions regarding payments, insurance, termination, warranty, governing law of the contract, liquidated damages, bonding requirements, notice procedures, waiver, and other requirements necessary and appropriate for the proper resolution of disputes, claims, and enforcement of the rights of the parties.

#### 51. SURETY BONDS

The Contractor shall furnish separate performance and payment bonds to the Owner within fifteen (15) days after the date of acceptance of this proposal by City Council action. Each bond shall set forth a penal sum in an amount not less than the Contract Price. Each bond furnished by the Contractor shall incorporate by reference the terms of this Contract as fully as though they were set forth verbatim in such bonds. In the event the Contract Price is adjusted by Change Order executed by the Contractor, the penal sum of both the performance bond and the payment bond shall be deemed increased by like amount. The performance and payment bonds furnished by the Contractor shall be in forms suitable to the Owner, in conformance with all the requirements of the Code of Alabama (1975), §39, and shall be executed by a surety, or sureties, reasonably suitable to the Owner. All bonds must be approved by the Mayor and the Clerk-Treasurer of the City of Huntsville.

#### 52. GOVERNING LAW

The Contract shall be governed by the laws of the State of Alabama.

#### 53. ALABAMA IMMIGRATION ACT (Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, Code of Alabama (1975)

Compliance with the requirements of the (Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, Code of Alabama (1975) § 31-13-1 through 31-13-30, commonly referred to as the Alabama Immigration Law, is required for City of Huntsville, Alabama contracts as a condition of the contract performance. The Contractor shall submit in the bid package, with the requested information included on the form, the "City of Huntsville, Alabama Report of Ownership Form" listed in this document as Attachment "H". The bidder selected for award of the contract may be required to complete additional forms relating to citizenship or alien status of the bidder and its employees, including e-verify information, prior to award of a contract.

#### 54. SUCCESSORS AND ASSIGNS

The Owner and Contractor bind themselves, their successors and assigns to the other party hereto and to successors and assigns of such other party in respect to covenants, agreements, and obligations contained in this Contract. The Contractor shall not assign this Contract without written consent of the Owner. In no event shall a contract be assigned to an unsuccessful bidder whose bid was rejected because he or she was not a responsible or responsive bidder.

#### 55. WRITTEN NOTICE

Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

#### 56. RIGHTS AND REMEDIES

Duties and obligations imposed by the Contract Documents and rights and remedies available there under shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

No action or failure to act by the Owner, Engineer, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach there under, except as may be specifically agreed in writing.

**57. ENTIRE AGREEMENT**

This Contract represents the entire agreement between the Owner and the Contractor and supersedes all prior communications, negotiations, representations or agreements, either written or oral. This agreement may be amended only by written instrument signed by both Owner and Contractor.



# HUNTSVILLE

Shane Davis, P.E.  
Director of  
City Engineering

Tommy Battle  
Mayor

**MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL  
(ELECTRICAL RELOCATION PHASE)**

**Project No. 65-10-RD09**

**January 6, 2011**

**Addendum #1**

*KVM*

**THE MANDATORY PRE-BID MEETING SCHEDULED FOR MONDAY,  
JANUARY 9, 2012 at 9:00 A.M. HAS BEEN POSTPONED. THE MEETING  
IS RESCHEDULED TO TUESDAY, JANUARY 24, 2012 AT 9:00 A.M. IN  
THE 1<sup>ST</sup> FLOOR CONFERENCE ROOM, PUBLIC SERVICES BLDG,  
320 FOUNTAIN CIRCLE, HUNTSVILLE, AL**

**PLEASE NOTE: The project advertisement has been revised and the project  
will be readvertised within 1 week from the date of this addendum. Please  
check the City of Huntsville website and other media for the readvertisement.**

**E-VERIFY – NOTICE**

The Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, *Code of Alabama (1975) § 31-13-1 through 31-13-30* (also known as and hereinafter referred to as “the Alabama Immigration Act”) is applicable to contracts with the City of Huntsville. As a condition for the award of a contract and as a term and condition of the contract with the City of Huntsville, in accordance with § 31-13-9 (a) of the Alabama Immigration Act, any business entity or employer that employs one or more employees shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien and shall attest to such by sworn affidavit signed before a notary. Such business entity or employer shall provide a copy of such affidavit to the City of Huntsville as part of its bid or proposal for the contract along with a copy of the Memorandum of Understanding as documentation establishing that the business entity or

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employer is enrolled in the E-Verify program. The required affidavit forms for the contractor and for subcontractors are included in the project specifications.

During the performance of the contract, such business entity or employer shall participate in the E-Verify program and shall verify every employee that is required to be verified according to the applicable federal rules and regulations. The business entity or employer shall assure that these requirements are required of every subcontractor in accordance with §31-13-9(c) and shall maintain records that are available upon request by the City, state authorities or law enforcement to verify compliance with the requirements of the Alabama Immigration Act. Failure to comply with these requirements may result in breach of contract, termination of the contract or subcontract, and possibly suspension or revocation of business licenses and permits in accordance with §31-13-9 (e) (1) & (2) or in the case of a subcontractor, in accordance with §31-13-9 (f) (1) & (2).

- Bidders' attention is directed to the following new item (#53) in the "Supplement to General Requirements for Construction of Public Improvements" document as posted on the COH website for this project:

**53. ALABAMA IMMIGRATION ACT** (Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, Code of Alabama (1975))

Compliance with the requirements of the (Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, Code of Alabama (1975) § 31-13-1 through 31-13-30, commonly referred to as the Alabama Immigration Law, is required for City of Huntsville, Alabama contracts as a condition of the contract performance. The Contractor shall submit in the bid package, with the requested information included on the form, the "City of Huntsville, Alabama Report of Ownership Form" listed in the project specifications. The bidder selected for award of the contract may be required to complete additional forms relating to citizenship or alien status of the bidder and its employees, including e-verify information, prior to award of a contract.

All addenda and attachments for the above- referenced project will become part of the contract documents. All addenda must be acknowledged either on the outside of the bid envelope or on the third page of your bid proposal known as Attachment "B".

**END OF ADDENDUM #1**





# HUNTSVILLE

Shane Davis, P.E.  
Director of  
City Engineering

Tommy Battle  
Mayor

## **MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL (ELECTRICAL RELOCATION PHASE)**

**Project No. 65-10-RD09**

**January 30, 2012**

### **Addendum #2**

*lum*

The attached pre-bid meeting minutes, all addenda, and attachments for the above- referenced project will become part of the contract documents.

#### **Attachment A is amended as follows:**

Replace bid quantities with "replacement", **Attachment "A1"**. Bids must be submitted on **Attachment "A1"**. Contractors are authorized to download revised quantities from website and paste to floppy disk or CD of their choice; one or the other must be submitted with the original bid packet. In addition, two hard copies must be submitted and signed with original bid packet. Contractors should be mindful of making changes to formatting already established in column for Bid Unit Price, as it may affect the outcome of their bid. In order to verify calculations are correct, Contractor may choose to manually multiply those unit costs x bid quantities to ensure extensions are correct, prior to printing and submitting with bid packet. If a price discrepancy is found on bid disk or CD, printed hard copy prices submitted with original bid documents, with Contractor signature, will prevail. However, calculations must be accurate and will be verified manually.

- Any bidder who designates a change on the outside of the envelope understands that any deletions or additions designated, bidder must further indicate the particular bid item relative to the deletion or addition, even if the deletion or addition references to deduct or add to the Total Base Bid.

#### **Additions to Quantities - Attachment "A-1":**

Item #18: Additional Clearing & Grubbing (to be approved by RSA for use outside EA limits) – 5 – AC

Item #19: Wattle, in accordance with ALDOT Spec 665 – 2,175 – LF

Item #20: Temporary Seeding, in accordance with ALDOT Spec 665 – 36 – ACRE

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**Questions from Contractors:**

1. **Q:** The existing line has 6 to 8 communication lines on it. Will these lines be placed back on the new pole line?  
**A:** No. The new pole line will not have any communications lines installed on them at this time.
2. **Q:** Do the proposed pole heights take into account crossing over the existing communication lines during construction?  
**A:** No.
3. **Q:** Can the job be done by industry standards of working with energized lines?  
**A:** No. No work will be done on energized lines.
4. **Q:** If work must be done only under de-energized conditions, can the contractor de-energize the lines or must this be scheduled and done with the base electrical contractor?  
**A:** They will have to schedule the outage with Redstone prior to the outage. Outages will have to be accomplished on weekends.
5. **Q:** Will interruptions of power to facilities along the route be done at their pleasure or can they be told a time that the power will be interrupted?  
**A:** They will be scheduled. A request for an outage must be submitted one week prior to the outage.
6. **Q:** On sheet 31 at station 43+50 south side, does a new pole need to be installed since the drawing shows tying back into the 3 phase tap on a 3 phase bank pole off of new pole 41?  
**A:** The resulting guys will have conflicts with the primary jumpers.  
Provide a new pole approximately 25' north of the existing transformer bank pole. This is considered incidental.
7. **Q:** On sheet 31 at station 44+00 south side, there is a warning siren located 18 feet off the center line of the proposed power line between new poles 40 & 41. Is any greater clearance desired from this structure for maintenance?  
**A:** The warning siren shall be relocated to match the existing distance off of the centerline of the new road. This effort shall be considered as incidental to the project.
8. **Q:** On sheet 31 at station 45+00 north side, the single phase line shows tying back in on a pole that is leaning at a 30 degree angle off of new pole 52. Should this pole be changed out?  
**A:** This pole shall be changed out and match the existing pole size and construction. This should be considered incidental.

9. **Q:** On sheet 31 at station 47+50 north side, there is a 3 phase underground service to building 6219. Does the new transformer pole 54 need to be located need to be located adjacent to the existing conduit for reconnection?  
**A:** The existing underground service shall be reused by Redstone personnel and be reconfigured to handle the change as well by Redstone personnel.
10. **Q:** On sheet 31 at station 49+50 north side, there is a 3 phase tap going north off of new pole 55 which will not have room for a down guy and anchor due to the cut line. How should this be resolved?  
**A:** This pole shall have a span guy installed to handle the stress.
11. **Q:** On sheet 32 at station 54+00 north side at new pole 57, there is a primary underground tap with open concentric neutral cable. Is this in a concrete encased duct bank per base standards? Does the wire require being changed out for the entirety of the 1050 foot length?  
**A:** No, it is not installed in concrete. No, it does not have to be changed the entire length. The cable shall be trimmed as needed to connect to the new pole.
12. **Q:** On sheet 32 at station 56+00 north side at new pole 58, there is an existing 3 phase transformer bank but only single phase is being service now. Can the 3 phase transformer bank be replaced with a single phase transformer?  
**A:** Yes, the two non-used transformers shall be returned to Redstone personnel.
13. **Q:** On sheet 35 at station 97+00 south side at new pole 12, can the gang operated switch which is called to be transferred but taken out of service for a few weeks to allow this move or should a new switch be installed and the old switch retired?  
**A:** Yes, retire existing and replace with new to match.
14. **Q:** On sheet 35 at station 98+00 north side, there is a new span guy pole 11 shown but the main line angles the wrong way for the span guy to be necessary.  
**A:** Delete pole #11 and the span across Martin Rd.
15. **Q:** On sheet 35 at station 106+00 south side, there is a very old pole which is called to be tied back into with the 3 phase tap from new pole 5. Should this pole be changed out?  
**A:** Yes, replace existing pole with new to match existing size. This is to be considered incidental.
16. **Q:** On sheet 36 at station 111+50 on the south side, there are two underground secondary services which go under a driveway. Should new pole 2 be placed to best allow the underground services to be reconnected without having to cut the driveways?  
**A:** Driveway can be cut, however owner reserves the right to relocate poles as needed during construction.

17. **Q:** What are the standard right of way widths to be cleared for single phase and three phase?

**A:** For 12,470 lines, a minimum of 30' Right-of-Way shall be clear. This means 15' on either side of the centerline of the overhead electrical line.

18. **Q:** Do the stumps have to be grubbed out or just cut/grind flush with the ground?

**A:** Stumps shall be completely removed from areas where future roadway limits exist per ALDOT 201A. Stumps may be ground to 1-foot below grade and sprayed with herbicide per ALDOT 201C in areas outside future roadway limits as shown on plans. Backfill shall be provided to match existing grade and/or positive drainage in areas of stump removal or grinding in accordance with ADEM requirements.

19. **Q:** Can mulch be left on site?

**A:** Yes, however must be spread and graded to meet existing grade and/or positive drainage in accordance with ADEM requirements.

20. **Q:** The contract calls for fiberglass strain insulators in all guys. This does not appear to be a base standard so should this requirement be omitted?

**A:** Yes, this shall be omitted.

21. **Q:** The contract calls for 3000psi concrete back-fill around all of the poles. This does not appear to be a base standard so should this requirement be omitted?

**A:** Yes, this shall be omitted.

22. **Q:** Who is to get the old material?

**A:** The poles and hardware are to be disposed of off Redstone. The wire shall be rolled up and left at the job trailer to be removed by Redstone personnel.

23. **Q:** Is the contractor responsible for moving the security lights on poles being removed to new locations or will that be done by base personnel?

**A:** The security lights shall be removed from the existing poles and returned to Redstone personnel. If any of the existing lights are damaged prior to removal, the contractor shall provide written notification to the project manager prior to the removal of the light.

24. **Q:** What are the requirements when we perform work beyond the EA line for cutting right of way and installing anchors since the contract says no work is to be done past this line?

**A:** Installation of all anchors shall be considered as incidental to the electrical project. Any access and clearing to be done outside the EA limits will require coordination and approval from RSA during construction. Permission may be granted to access these areas. If additional clearing and grubbing is required to be done outside the EA limits, it will be paid for under a new line item NO. 3 – "Additional clearing and grubbing outside the EA

limits as approved by RSA” – 5 AC and shall be paid based on the area of clearing needed for installation of anchors outside EA limits as needed for construction.

25. **Q:** Will limbs which overhang the EA limits be required to be removed if the tree trunk is outside of the EA limits?

**A:** Yes, limbs will need to be cut to meet requirements set forth by electrical codes.

26. **Q:** Will all stumps be required to be completely removed (ALDOT 201A) or can they be ground to 1’ below ground level and sprayed with an ALDOT approved herbicide (ALDOT 201C)?

**A:** See response 18 above.

**Additional Notes:**

(1) Place and splice 24-gauge gel filled copper cable from manhole @ the existing rt site to the manhole at Anderson Road. – Approx. 2,000 feet.

(2) Copper cables and fiber cables shall not be placed in same conduits.

(3) Manhole and handhole numbers to be provided by NEC-R as well as cable name, cable counts, etc. after bid award.

All addenda must be acknowledged either on the outside of the bid envelope or on the third page of your bid proposal known as Attachment “B”.

**Attachments: Pre-Bid Minutes  
Revised Quantities – Attachment “A-1”**

**END OF ADDENDUM #2**

## MANDATORY PRE-BID MEETING

PROJECT NAME: Martin Road Electrical and Communication Relocation

PROJECT # 65-10-RD09

OWNER: City of Huntsville, Alabama (COH)

ULTIMATE USER: Redstone Arsenal Directorate of Public Works (DPW)

PROJECT ENGINEER: Kathy Martin

DESIGN ENGINEER: Johnson & Associates

DATE: January 24, 2012

The following people were in attendance at the mandatory pre-bid meeting:

|                    |                         |
|--------------------|-------------------------|
| Stephen Walker     | Johnson & Associates    |
| Tom Cunningham     | Johnson & Associates    |
| Adam Crenshaw      | Johnson & Associates    |
| Tom Richardson     | Redstone-DPW            |
| Jerry Robinson     | Redstone-DPW            |
| Clint Howard       | Redstone-DPW            |
| Butch Harris       | Redstone-NEC            |
| Jerry Hyatt        | Redstone-NEC            |
| Chris Bryon        | Tetra Tech              |
| Penny Kelly        | COH-Eng                 |
| Kathy Martin       | COH-Eng                 |
| Larry Tilley       | COH-Eng                 |
| Mary Hollingsworth | COH-Eng                 |
| Lee Campbell       | Service Electric        |
| Todd Taylor        | Taylor Electric         |
| Chris Holladay     | Taylor Electric         |
| Jeff Barnett       | Taylor Electric         |
| Tim Mayhall        | Reed Contracting        |
| Tony Christopher   | CP&E                    |
| Wiley Gullion      | GMSI                    |
| Jerry Poe          | Knology                 |
| Josh Chandler      | SJ&L General Contractor |
| Jerry Wall         | APAC                    |

1. Introduction of all persons present, their roles, chain of command, importance of submittals to Project Engineer.

COH, Redstone, Design Engineers were introduced.

Kathy Martin-Project Engineer



Larry Tilley-COH Inspector – Project point of contact on site daily.

Redstone Arsenal (RSA)-Tom Richardson-Redstone Director of Public Works- RSA project engineer for the road project as a whole, coordinating utility work with the road project is his area of concern; Jerry Robinson-Redstone Director of Public Works-electrical utility system on Redstone, point of contact for electrical outages and coordination of actual onsite preparation of work; Butch Harris-NEC Redstone-point of contact for Communications relocation side; Jerry Hyatt-also with Network Enterprise Center on Redstone. Butch and Jerry will be overseeing construction to make sure that the communications work, duct work, is done correctly the first time to avoid confusion; they will be making sure that the work complies with the proper specification.

Design Engineer-Johnson & Associates; Tetra Tech did the electrical and communications design as a subcontractor for Johnson & Associates.

All submittals are to go through the Project Engineer, Kathy Martin, for disbursement to appropriate parties.

2. Project Engineer to give a brief description of work:

This project is approximately 2.5 miles of roadway improvements with this phase consisting of the installation of overhead power and underground communication lines. Also involved is clearing & grubbing, fence removal and installation, traffic control, and erosion control.

3. Progress Schedule of Operations was discussed, as well as erosion control plan, disposal of debris from clearing and grubbing, plan for control of concrete temperature during hot/cold weather, etc. If the progress report (critical path) is not received, YOUR first pay estimate will NOT BE PROCESSED UNTIL IT IS RECEIVED).

A critical path project schedule should be submitted by the successful Contractor within seven (7) days of bid award. There are erosion control plans outlining required measures which must be installed as a subsidiary item to the contract. All debris from clearing operations are to be removed from the site except where the contract plans and the EA document requires that excavations remain on site. In the EA document, there are some excavations that are required to be placed back in the area where they were removed.

RSA does not issue burn permits; however, a dig permit is required to be obtained. All debris must be removed from Redstone Arsenal unless stated otherwise by RSA. Mulch can be redistributed on-site. Any other material must be disposed of off-site.

#### 4. Discuss all Permits.

Redstone personnel discussed security procedures, badge requirements, etc. For security badges, in order to get on Redstone Arsenal, will have to have a valid driver's license. RSA asks that once the project is awarded, the staff that will be on-site will be awarded visitor's badges. This means that the contractor's staff will not be able to escort someone else, but will be able to come on and off post during working hours. RSA requires the following information from each personnel: full name, date of birth, social security number. This information is kept confidential. This information will be transmitted to Redstone for them to be able to issue badges. It takes two (2) to three (3) weeks to get a visitor's badge. Contractor needs to provide a listing of personnel on the project upon award of contract, RSA will process them and get them their badges issued as soon as possible. For each vehicle coming on post, will have to have registration and proof of insurance. Vehicles badges are no longer being given out. Vehicles are subject to be stopped at any time and will be ticketed if no proof of insurance or registration is in the vehicle. Heavy equipment and deliveries will have to come through Gate 1 unless special provisions are made with RSA ahead of time; at least 48 hours prior to arrival.

A dig permit is required. This permit is a one-time deal. Before ground is broken, contractor will call in for a dig permit (utility location). RSA Utility will come out and re-mark everything. Dig permit will come from the locate company once it is clear. The permit will need to stay in the project trailer at all times.

The intent of the project is to have both lanes of traffic remain open at all times. Traffic Control shall be performed in accordance with MUTCD latest version. If traffic has to be stopped for a couple of minutes, Tom Richardson will not have to be notified. If there are any significant lane closures for an hour or more, contractor will need to let Tom Richardson know at least a day in advance so that he can advertise if necessary. If the road closure is for more than a day, he will need at least a week's notice. During peak travel times, 7:00 am -8:30 am and 3:30 pm-5:00 pm, avoid any road closures. Gate 7 is closed on the weekend and holidays. RSA encourages weekend and after-hours work. RSA will verify what time Gate 7 closes every evening.

5. Utility Project Notification – Utility company representatives should give a description of their utility conflicts. Any problems the utility representative anticipates should be explained so that Project Engineer and Contractor can plan to include in the project. Each utility representative should provide Contractor with a name and phone number to contact for conflict assistance. Contractor is responsible for locating all utilities.

Redstone personnel can address all utility concerns as they are the owners. Contact info will be made available. Also, Redstone personnel will be conducting QC/QA activities throughout the project since the end product will pass to their ownership and responsibility. The water main relocation shown on the drawings is complete and

the existing main line was abandoned in place. Beyond the dig permit, which includes utility locates, any other utility locates needs to be addressed through Redstone personnel.

6. Discussed Submittal of Shop Drawings, working drawings, material submittals, job-mix formulas in accordance with the time limits in the contract.

All material submittals, shop drawings, and all other submittals are to be submitted to Kathy Martin, Project Engineer in electronic format if possible. She will then distribute to the appropriate parties for review. Keep in mind that some submittals will require review by COH, Design Engineers, and Redstone personnel. The specs allow for up to 2 weeks of review time. Documents should be submitted in a timely manner so as to avoid disruption of the project schedule.

7. Any right-of-way issues were discussed. Detail whether all property has been acquired to complete project and if not, when expected

There are no ROW issues; this is all Redstone Arsenal property; however, there is a requirement that the E/A line (Construction Limits) be staked by a registered PLS prior to installation of silt fence. NO disturbance outside the EA limits.

8. Any other projects that may conflict should have their project engineer, contractor and representatives in attendance to discuss.

There should be no other active projects in the project limits that would hinder progress on this project. During the site visit, it was noted that Gate 7 project is currently under construction. Contractor is required to coordinate with others on site. Gate 7 project is anticipated to be complete in April.

9. Contractor is required to submit pricing (Attachment "A") on either a 3 1/2" floppy disk or CD in the Excel format made available for download from the Engineering website. The bid disk or the CD must be in working condition and included with original bid packet and reflect the correct revision, along with two signed hard copies. Failure to do so shall be cause for rejection of bid. If a price discrepancy is found on bid disk or CD, printed hard copy prices submitted with original bid documents, with Contractor signature, will prevail.

Also, the Contractor must submit, to the Project Engineer, a schedule of values for all Lump Sum items within seven (7) days of contract award. The schedule of values must be broken out in detail to show any major line items of work for monthly payment. The Contractor will be required to review all quantities monthly with Larry Tilley prior to submitting a pay request.

## 10. PAYMENT

The OWNER agrees to pay the contractor as follows: Once each month per project the OWNER shall make partial payment to the Contractor on the basis of duly certified and approved estimates of the work performed during the preceding month by the Contractor, less five (5%) of the amount of such estimate, which is to be retained by the City until all of the work has been performed. Liquidated damages will be deducted from all invoices when the invoice estimate period end date is later than the contract completion date. All pay requests will be submitted by hard copy and on disk. The hard copy will be printed from the disk. The OWNER will provide the disk to the contractor. Two originals and two copies of the invoices are required before payment will be made. The disk should be submitted each month, along with the originals and copies, to Odessa Sales in the Engineering Department. No further retainage will be held after fifty percent of the contract is complete. All payments to contractor will be made as soon as practical after the approval and finance processes have been completed

## 11. Project Engineer should discuss plans, specs and special provisions.

a. A review of the plans should be made with emphasis placed on unusual construction features and special drawings.

- Front Sheets: Title Sheet, Legend, etc: No Comment.
- Geometric Layout: Should be adequate control. Johnson & Associates can supply CADD files upon request.
- Project Notes: No Comment.
- Plan Sheets: This section is for information purposes. This is an electrical and communication relocation phase of a soon to come roadway expansion project. Contractors need to be aware that they will see information on the sheets that is not pertinent to this project, but it may be useful. Shows existing conditions. Shows fence removal and fence installation locations. All fenced areas must be full contained. The new fence has to be up before the old fence can be taken down. Any contained areas must remain contained.
- Utility Sheets (14-28): Note on Sheet 14 about stone backfill only applies to areas under existing or future pavements. This includes future sections of roadway or driveways that are anticipated in the roadway project. This section shows electrical locations and information. Sheet 28 has Electrical and Communication notes as well as a pole index chart.
- Utility Plan Sheets (29-36): This section shows Communication locations and information. No open cut will be allowed across Indian Creek. All Communication duct banks and boxes must be complete within the first four (4) months of the six (6) month contract duration. This is necessary for Redstone to coordinate cutovers with various vendors and associated lead times. From the NTP to four (4) months past this date, all the

communication conduit and boxes must be in-place, ready for Redstone to allow their vendors to come in and start pulling fiber. Butch and Jerry gave a brief description of RSA scope of work. Butch said that all conduit, manholes, handholds, fiber pulls, non-hot splices will all need to be done within the four (4) month period. The additional two (2) months is for RSA to do hot-splices. There are three (3) carriers that provide service to Redstone. RSA will meet with them to give them a time frame based on the schedule submitted by the Contractor; this relates to the critical path. There is a government work component to the critical path to completing this project. RSA will be providing the service. Contractor will do all the overhead electrical work to the secondary and from of the transformers and RSA will handle making up the secondary connections if they have to extend or trim those and any alterations that RSA has to make on the secondary loading of the transformers to the buildings for the service tie-ins. Contractor will construct the new line, will relocate the existing transformers and RSA will do all the secondary work. RSA will be coordinating with contractor on when and where they need to do items. Contractors were given a chance to give their opinion on whether they thought the work, especially the communication end of it, could be done in the four (4) month time frame. No one voiced an opinion.

- Detail Sheets (37-42): This section includes details for Electrical, Communications, and new fence. Attention is drawn to the I3A Document. All materials must be in conformance with the requirements of the I3A. This document is available on the COH website. Tetra Tech had an opportunity to discuss the Utility Sections. Chris Bryon said it was pretty straightforward, unless the contractors had any specific questions. He said it was pretty much covered within the plans.
- Erosion and Sediment Control Sheets (44-52): Previously discussed. The two (2) required construction entrances (access roadway) are to be included in Item #1. These entrances are required to be maintained during construction, and accessible upon final acceptance of the project for future use by RSA.
- Traffic Control Sheets (54-66): Under the Sequence Notes on Sheet 54, any stump removal will be part of the Clearing and Grubbing item. COH will not perform this work. The Contractor will be responsible for the safe and effective flow of traffic during construction. Any road closures will require coordination through Redstone.

b. Each pay item of the contract was read out and any questions concerning the method of measurement of payment was discussed.

- Item #1: This item includes all plan/spec requirements for the electrical and communication improvements. Monthly payments will be based on progress, as determined by Kathy Martin, and keyed to the submitted schedule of values. The schedule of values will also be used to account for any changes in scope which may occur. This item will include everything

necessary to make the Electrical/Communication system complete and operational and to include access to the construction zone as well as removal of old lines and poles as directed by RSA.

- Item #2: Monthly payments will be based on progress as determined by COH.
- Item #3 & 4: No Comment. The new fence has to be installed before the old fence is removed. If there is an area that is contained, it has to stay contained. Fence reset shall be in-kind, and Contractor is responsible for re-installing all fence signage as incidental to the line item.
- Item #5: This item is to be used as necessary for repairs to existing stone accesses. It will require prior approval from COH to qualify for payment. Before rock is used, contractor must clear it with Larry Tilley.
- Item #6: Any other required EC measures will be considered subsidiary to this item. Silt fence, prior to installation, should also be cleared through Larry Tilley. Will leave grassing open, but any erosion control measures beyond the silt fence, if necessary, will be considered subsidiary. Basically talking about wattles, inlet protection. Tony Christopher recommends that COH add a pay item for wattles. If ADEM makes the inspection, and COH has told the contractor what to do, COH is leaving itself liable there. Steve said we may add pay items.
- Item #7-12: These items will require prior approval from COH to qualify for payment. Would like for Larry Tilley to know beforehand what the contractor plans to do on the traffic control items. Quantities on each item will only be paid once even if they are reset in other areas.
- Item #13: This item will include all necessary construction staking, as well as the previously mentioned EA line, which is also the construction limits line, stakeout and as-builts, both of which must be performed by a licensed PLS. The as-builts must be consistent with original survey control data.
- Item #14: COH currently has an active ADEM permit. The Contractor will be required to transfer the permit into their name. After the project is completed and accepted by COH and RSA, it will be transferred out of the contractor's name. When the permit is under the contractor's ownership, they are responsible for maintaining the permit to include inspections/monitoring as stated in the Permit. Tony said that's why erosion control needs to be set up lump sum. If it is the contractor's responsibility, the City should not be dictating what the contractor does. Contractor is responsible to ADEM for all the erosion control. Steve said they'll look at it. He said it wasn't his intention to control the installation of erosion control measures. Tony said if the item is set up as LF and the contractor has to get permission before putting it in, that's what COH is doing. He said that ADEM recognizes that. Erosion control will be revisited and will issue an addendum addressing those things.
- Item #15: Location to be coordinated with Redstone.
- Item #16: To be paid upon mobilization of the two major items; Electrical and Communication



c. When a contractor is new to COH contracts, the standard specifications should be discussed with emphasis on time charges, extra work, materials, etc.

Discussion if needed.

d. State of Alabama classification required shall be stated. (Pre-Qualified)

e. Calendar days (180) to complete project. (asked during pre-bid meeting if there was any concern that contract cannot be completed within contract time specified.) Council: 2/9/12; Anticipated NTP: no later than 2/24/12; and anticipated completion date: 8/22/12.

Note: Tentatively, the bids will be opened on the same date as Engineering's deadline date for submitting council items for approval to the Mayor/Clerk's offices. This leaves a very small turnaround time for getting the paperwork in order. The low bidder is requested to submit the following items as soon as possible after he is confirmed as the low bidder to Mary Hollingsworth or Penny Kelly which are required for the contract before any routing can be done: (1) E-Verify affidavit; (2) E-Verify Memorandum of Understanding (MOU) and (3) Signed Contract Page.

f. (include whether construction trailer is required and whether as-builts are required)

Trailer and as-builts are required. The trailer is to be ALDOT Type II and should be set up within the first two (2) weeks, paid on a monthly basis as long as it is in accordance with specs. Once the trailer is set-up, utilities will be set-up through Redstone and as RSA anticipates right now, water and electricity are pretty close to the site they're anticipating to use. The contractor will need to sign a utility service agreement with RSA and will pay RSA directly through their accounts department for the usage. Red line as-builts are required to be updated on a monthly basis and the COH reserves the right to withhold monthly payments if the updates are not in order. Digital as-builts for the electrical and communication infrastructure is required to be submitted in .dgn format.

g. Introduction and explanation of any revisions to Supplement to General Requirements – specifically detail the following:

#### 46. SHOP DRAWINGS

The approval of shop drawings by the Engineer will cover only the features of the design and in no case shall this approval be considered to cover error or omissions in shop details or a check of any dimensions. The Contractor shall be responsible for the accuracy of the shop drawings, the fabrication of materials and the fit of all connections; and he shall bear the cost of all extra work in erection caused by errors in shop drawings or in fabrication, inaccurate workmanship, misfits of connections or

for any changes in fabrication necessary. No work shall be done on the material before the shop drawings have been approved. Any material that the Contractor orders prior to the approval shall be at the Contractor's risk.

Substitutions or changes whether indicated or implied on shop drawings will not be considered as changes regardless of the Engineer's approval of shop drawings unless the change has been previously submitted and approved as a change order per the requirements for changes in the contract.

After a shop drawing has been approved, no changes shall be made unless directed in writing to the Owner and acceptance by the Owner of said changes. Any acceptance of change by the Owner does not constitute a change to the contract unless that change has been approved and directed in writing per change order. Compensation for preparing and furnishing all shop and working drawings shall be included in the contract unit prices for the various pay items of work.

#### 15. LIQUIDATED DAMAGES

It is further understood and agreed by and between the parties to this contract, that in the event the work to be performed under this contract is not completed at the expiration of the contract time, then, and in that event, the Contractor shall pay to the City the amounts per calendar day by the schedule shown in the schedule in the City of Huntsville Standard Specifications, Section 80.11 - "Schedule of Liquidated Damages" for each day thereafter until such work is completed. The City will deduct said sum or sums from any money due the Contractor under this contract for any and all invoices submitted after the contract due date. Liquidated damages will be deducted from all invoices when the invoice estimate period end date is later than the contract completion date.

**Section 80.11 - "Schedule of Liquidated Damages" has been amended as follows effective 3/7/11:**

| Original Contract Amount |                  | Liquidated Damages Daily Charge |          |
|--------------------------|------------------|---------------------------------|----------|
| More Than                | To and Including | Calendar Day or Fixed Date      | Work Day |
| \$ 0                     | \$ 100,000       | \$ 200                          | \$ 400   |
| \$ 100,000               | \$ 500,000       | \$ 550                          | \$ 1,100 |
| \$ 500,000               | \$ 1,000,000     | \$ 900                          | \$ 1,800 |
| \$ 1,000,000             | \$ 2,000,000     | \$ 1,350                        | \$ 2,700 |
| \$ 2,000,000             | .....            | \$ 1,550                        | \$ 3,100 |

When the contract time is on the calendar day or date basis, the schedule for calendar days shall be used. When the contract time is on a work day basis, the schedule for work days shall be used.

Amounts in accordance with ALDOT and COH specifications and is based on contract amount before Change Orders.

12. Sequence of Construction and Traffic Control with the contractor made aware of his/her responsibility to handle traffic safely through the work zone. The method of payment for traffic control shall be discussed and clearly understood.

This was previously discussed.

13. For any trench cuts within existing roadways, Contractor is required to patch area with asphalt mix within the same day, unless otherwise specified by the Engineer. (Dense graded Base is no longer an acceptable means of traffic control within existing roadway cuts.)
14. Any subcontractors present were given the opportunity to ask questions or discuss items with which they are concerned. The Prime Contractor should be advised that no work by a subcontractor will be permitted unless approved by contract or in writing.
15. Anyone working for the Contractor, whether equipment and/or personnel, which are not the Prime Contractors and are not covered by subcontract, then it shall be understood that the Prime Contractor will be required to furnish a rental agreement for the equipment and carry personnel performing such work on his/her labor payroll.
16. Successful contractor will be required to sign the following statement, included as part of the contract:

### **E-VERIFY - NOTICE**

The Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, *Code of Alabama (1975) § 31-13-1 through 31-13-30* (also known as and hereinafter referred to as "the Alabama Immigration Act") is applicable to contracts with the City of Huntsville. As a condition for the award of a contract and as a term and condition of the contract with the City of Huntsville, in accordance with § 31-13-9 (a) of the Alabama Immigration Act, any business entity or employer that employs one or more employees shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien and shall attest to such by sworn affidavit signed before a notary. Such business entity or employer shall provide a copy of such affidavit to the City of Huntsville as part of its bid or proposal for the contract along with a copy of the Memorandum of Understanding as documentation establishing that the business entity or employer is enrolled in the E-Verify program. The required affidavit forms for the contractor and for subcontractors are included in the project specifications.

During the performance of the contract, such business entity or employer shall participate in the E-Verify program and shall verify every employee that is required to be verified according to the applicable federal rules and regulations. The business entity or employer

shall assure that these requirements are required of every subcontractor in accordance with §31-13-9(c) and shall maintain records that are available upon request by the City, state authorities or law enforcement to verify compliance with the requirements of the Alabama Immigration Act. Failure to comply with these requirements may result in breach of contract, termination of the contract or subcontract, and possibly suspension or revocation of business licenses and permits in accordance with §31-13-9 (e) (1) & (2) or in the case of a subcontractor, in accordance with §31-13- 9 (f) (1) & (2).

- Bidders' attention is directed to the following new item (#53) in the "Supplement to General Requirements for Construction of Public Improvements" document as posted on the COH website for this project:

**53. ALABAMA IMMIGRATION ACT** (Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, Code of Alabama (1975))

Compliance with the requirements of the (Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, Code of Alabama (1975) § 31-13-1 through 31-13-30, commonly referred to as the Alabama Immigration Law, is required for City of Huntsville, Alabama contracts as a condition of the contract performance. The Contractor shall submit in the bid package, with the requested information included on the form, the "City of Huntsville, Alabama Report of Ownership Form" listed in this document as Attachment "H". The bidder selected for award of the contract may be required to complete additional forms relating to citizenship or alien status of the bidder and its employees, including e-verify information, prior to award of a contract.

17. Ask if there are any further questions.

Penny stated that Pre-Qualification by the bidders will be required. If a contractor has not pre-qualified, then they will not be able to submit a bid.

There will be a site visit after the pre-bid meeting. All contractors are to meet at the Visitor's Center parking lot at Gate 9 at 10:30 am. There will be a City shuttle bus available to take everyone through the site.

18. All questions will be answered and all clarifications made by addendum. Last day for questions concerning this project before the bid will be Thursday, Jan. 26, 2012 until 12:00 p.m. via fax (256) 427-5325 or email to: penny.kelly@huntsvilleal.gov. Response to contractor questions will be Monday, Jan. 30, 2012 until 12:00 p.m. Bids open: Wed., 2/1/12 at 2:00 p.m. in the 1<sup>st</sup> Floor Conference Room, 320 Fountain Circle, Huntsville, AL. The pre-bid notes and all addenda shall become a part of the contract documents.

Q: Can you tell by looking at the drawings where future roadways will be?

A: Steve said pavements, but he thinks there are some gravel drives. Any traffic bearing locations, existing or future, will require stone backfill.

Q: There are six (6) communications on the pole line. Will all of those disappear so that the only thing on the pole line will be electric?

A: On the new line, yes.

Q: Taylor Electric said they had several questions specific to the electric utility. He asked would they be able to ask those at the site meeting.

A: Yes. Any questions asked at the site visit needs to be recorded, addressed and redistributed back to all the bidders.

Q: What is aggregate surfacing set up for?

A: This will be for repair of gravel drives; in case contractor needs to replace or do maintenance on the existing driveways.

Q: Erosion control drawing shows silt fence is being used.

A: Steve would still like to get it cleared through Larry Tilley. There may be a reason to not install sections of silt fence.

Q: On the erosion control drawings, it shows wattles being used. There is not a line item for wattles.

A: Everything other than silt fence will need to be bid subsidiary to the other items.

Q: The ADEM permit is issued according to the erosion control drawings, correct?

A: That is right.

Q: If that is correct, then the silt fence shown on the drawings has to be installed.

A: Steve doesn't think that it has to be. The permit is a living document and ADEM does not expect or require contractor to put erosion control measures in if they are not effective just because they are on a design drawing. Steve said he isn't saying that the contractor doesn't have to install it according to plans; he feels like before the contractor starts installing silt fence along the line shown on the drawings, and the COH is paying for that, he would like for that to go through the COH project management team and let them make the decision. The plans can be altered or changed as needed in the field.

Q: Who will determine if wattles or silt fence are to be installed?

A: If there is a disturbed area, contractor will be required to install erosion control measures. Contractor is required to contain that erosion and sedimentation resulting from that exposed material. Only silt fence is set up as a pay item, but anything else that is necessary, if it is necessary to put inlet protection, even on an existing inlet, then that is what the contractor is expected to do.

Q: Can a pay item be set up for inlet protection?

A: Will be discussed and clarified in a future addendum.

Q: Can it be added to the quantities?

A: Steve said he's not going to say that we will right now; the statement he's making is that any erosion/sedimentation control item necessary beyond silt fence be considered subsidiary to other items.

Q: Is the contractor left to guess?

A: Kathy said it shows on the plans, they will look at adding an item. It will be addressed in the addendum.

Q: What about the grassing? Will it be considered a subsidiary also?

A: Grassing will be addressed in the addendum.

Q: Is the silt fence to be Type A or ALDOT specs.

A: It is the type with the wire reinforcement trench. It is Type A.

Q: What is the hydro-seeding for?

A: It is in the plans. Will leave the grassing issue open for the moment; Kathy and Steve will discuss it and make a clarification through the addendum.

Q: On traffic control items, do the quantities have to be approved?

A: The quantities don't have to be approved. Larry Tilley needs to be made aware before traffic control schemes are installed, or as material is being delivered or stored on site for payment purposes. He will also need to be aware of any lane closures or extended working hours as previously discussed.

Q: What about if the traffic control items are set up like what is on the drawings?

A: That is fine, but still wants Larry to know beforehand so he knows what the contractor is doing. Steve's main point on that is the items are itemized, and typically the signs unit price are SF. Any traffic control item, when it comes onto that project, it will be a rolling project; therefore, there could be movement of these traffic control devices. They will only be paid once, even as they're moved up and down the line.

Q: On the project notes, there is a note about the contractor being responsible for positive drainage. Tim said he guesses that is for any disturbed soils?

A: Steve said he doesn't think that is really relevant to this phase. He said that is probably for the early section. He reminded contractors to keep in mind that these plans were taken out of the roadway set of plans. He thinks the intention of that note was during the roadway phase. He doesn't see anywhere in the plans where that note is relevant. During the site visit, it was further clarified that the areas where grubbing will be required to prepare for the future roadway, the Contractor is required to leave this area clean of debris and graded to match existing



elevations, with proper erosion/sediment control in place in accordance with the ADEM permit.

Q: To clarify, any areas that are ponding right now, the contractor isn't expected to keep it drained?

A: No, are not expecting any remedies for existing conditions. This phase is putting in utility relocations. Any improvements to drainage will come in the next phase.

Q: Will that note be struck from the plans?

A: No, there is no intention to strike it from the plans. Steve mentioned earlier that the plans sheets that are in the plan set are for informational purposes showing existing conditions. Steve said the contractor will see a lot of notes and things that are not relevant to this phase of the work. The only note that Steve struck out was the note on the trench backfill requirements. The traffic must be maintained safely and effectively through the project. If the contractor is going through an existing intersection and has to do a utility cut, if there are drainage issues associated with the work that the contractor is doing, then, yes the contractor would be required to keep traffic flowing in a safe and effective manner. Beyond that, Steve said he doesn't know how that could possibly come into play.

During the site visit, it was also noted by Butch Harris that the below is required as part of the contract:

From new Manhole at RT Site, approx. 100-feet of 24 gauge 300 pair copper cable from Manhole to the existing RT site and splice to the 100 pair cables in the Manhole, location is shown on Drawing No. 31 near building 6301.

## Attachment "A-1"

1/30/2012

**MARTIN ROAD IMPROVEMENTS ON REDSTONE ARSENAL  
(ELECTRICAL RELOCATION PHASE)**Beginning 2000 feet east of Zeirdt Road and continuing east to the intersection  
of Martin Road and Rideout Road

Project No. 65-10-RD09

| ITEM                                                                                                                                                                                       | DESCRIPTION                                                                                                                                                  | BID QTY | BID UNIT | BID PRICE | BID AMOUNT    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------|-----------|---------------|
| 1                                                                                                                                                                                          | Utilities Relocation - Overhead Power and UG Communications, to include all removals upon completion. Complete in place, in accordance with plans and specs. | 1       | LS       |           | \$0.00        |
| 2                                                                                                                                                                                          | Clearing & Grubbing (Approximately 36 acres), in accordance with ALDOT Spec 201                                                                              | 1       | LS       |           | \$0.00        |
| 3                                                                                                                                                                                          | Removing Fence, in accordance with ALDOT Spec 260                                                                                                            | 8296    | LF       |           | \$0.00        |
| 4                                                                                                                                                                                          | Barbed Wire Fence, in accordance with ALDOT Spec 636                                                                                                         | 8296    | LF       |           | \$0.00        |
| 5                                                                                                                                                                                          | 430-B Aggregate Surfacing (ALDOT #467, #410 Modified or #57), in accordance with ALDOT Spec 430                                                              | 500     | TON      |           | \$0.00        |
| 6                                                                                                                                                                                          | Silt Fence, complete in place to include maintenance and removals.                                                                                           | 19439   | LF       |           | \$0.00        |
| 7                                                                                                                                                                                          | 740-B Construction Signs, in accordance with ALDOT Spec 740                                                                                                  | 414     | SF       |           | \$0.00        |
| 8                                                                                                                                                                                          | 740-D Channelizing Drums, in accordance with ALDOT Spec 740                                                                                                  | 200     | EA       |           | \$0.00        |
| 9                                                                                                                                                                                          | 740-E Cones (36 Inches High), in accordance with ALDOT Spec 740                                                                                              | 100     | EA       |           | \$0.00        |
| 10                                                                                                                                                                                         | 740-F Barricades, Type III, in accordance with ALDOT Spec 740                                                                                                | 2       | EA       |           | \$0.00        |
| 11                                                                                                                                                                                         | 740-I Warning Lights, Type B (Detachable Head), in accordance with ALDOT Spec 740                                                                            | 2       | EA       |           | \$0.00        |
| 12                                                                                                                                                                                         | 740-M Ballast For Cone, in accordance with ALDOT Spec 740                                                                                                    | 100     | EA       |           | \$0.00        |
| 13                                                                                                                                                                                         | Engineering Controls & Construction Staking, in accordance with ALDOT Spec 680                                                                               | 1       | LS       |           | \$0.00        |
| 14                                                                                                                                                                                         | Bonds, Permits, ADEM Monitoring, etc., in accordance with ALDOT Spec 600                                                                                     | 1       | LS       |           | \$0.00        |
| 15                                                                                                                                                                                         | Field Office, ALDOT Type II, in accordance with ALDOT Spec 600                                                                                               | 6       | MO       |           | \$0.00        |
| 16                                                                                                                                                                                         | Mobilization, in accordance with ALDOT Spec 600                                                                                                              | 1       | LS       |           | \$0.00        |
| 17                                                                                                                                                                                         | Digital As-Builts                                                                                                                                            | 1       | LS       |           | \$0.00        |
| 18                                                                                                                                                                                         | Additional Clearing & Grubbing, (to be approved by RSA for use outside EA limits)                                                                            | 5       | AC       |           | \$0.00        |
| 19                                                                                                                                                                                         | Wattle, in accordance with ALDOT Spec 665                                                                                                                    | 2175    | LF       |           | \$0.00        |
| 20                                                                                                                                                                                         | Temporary Seeding, in accordance with ALDOT Spec 665                                                                                                         | 36      | ACRE     |           | \$0.00        |
| <b>TOTAL BASE BID:</b>                                                                                                                                                                     |                                                                                                                                                              |         |          |           | <b>\$0.00</b> |
| ALL ITEMS SHALL BE CONSIDERED IN-PLACE. PRICES SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, APPURTENANCES OVERHEAD, FEES AND REMOVALS AS REQUIRED FOR CONSTRUCTION OF THE REQUIRED WORK. |                                                                                                                                                              |         |          |           |               |
| COMPANY _____                                                                                                                                                                              |                                                                                                                                                              |         |          |           |               |
| SIGNATURE _____                                                                                                                                                                            |                                                                                                                                                              |         |          |           |               |
| DATE _____                                                                                                                                                                                 |                                                                                                                                                              |         |          |           |               |

### CERTIFICATION OF COMPLIANCE WITH TITLE 39, CODE OF ALABAMA

In accordance with Code of Alabama (1975) §39-5-1(b), I hereby certify that the contract with Christopher Professional Enterprises, Inc., in the amount of One Million Seven Hundred Four Thousand Two Hundred Thirty-One and No/100 Dollars (\$1,704,231.00), for Martin Road Improvements on Redstone Arsenal (Electrical Relocation Phase), which is being submitted to the City Council of the City of Huntsville for approval on this the 9th day of February, 2012, has been let in accordance with Code of Alabama, Title 39 and all other applicable provisions.



Shane Davis  
Director of City Engineering/Urban Development  
City of Huntsville

### E-VERIFY CLAUSE

The Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No. 2011-535, *Code of Alabama (1975) § 31-13-1 through 31-13-30* (also known as and hereinafter referred to as "the Alabama Immigration Act") is applicable to contracts with the City of Huntsville. As a condition for the award of a contract and as a term and condition of the contract with the City of Huntsville, in accordance with § 31-13-9 (a) of the Alabama Immigration Act, any business entity or employer that employs one or more employees shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien and shall attest to such by sworn affidavit signed before a notary. Such business entity or employer shall provide a copy of such affidavit to the City of Huntsville as part of its bid or proposal for the contract along with a copy of the Memorandum of Understanding as documentation establishing that the business entity or employer is enrolled in the E-Verify program. The required affidavit form for the business entity and for sub-consultants/business entities employed by the contracting business entity are included as Attachment "J" in this contract. The original affidavit for your business entity must be returned to the City of Huntsville, the affidavit for the subcontractors should be kept on file in your office, and be made available to the city if requested.

During the performance of the contract, such business entity or employer shall participate in the E-Verify program and shall verify every employee that is required to be verified according to the applicable federal rules and regulations. The business entity or employer shall assure that these requirements are required of every subcontractor in accordance with §31-13-9(c) and shall maintain records that are available upon request by the City, state authorities or law enforcement to verify compliance with the requirements of the Alabama Immigration Act. Failure to comply with these requirements may result in breach of contract, termination of the contract or subcontract, and possibly suspension or revocation of business licenses and permits in accordance with §31-13-9 (e) (1) & (2) or in the case of a subcontractor, in accordance with §31-13-9 (f) (1) & (2).

Christopher Professional Enterprises, Inc.  
(Company)

BY:   
(Authorized Representative)